8436

ORDER NO. VRD9006M140
B10

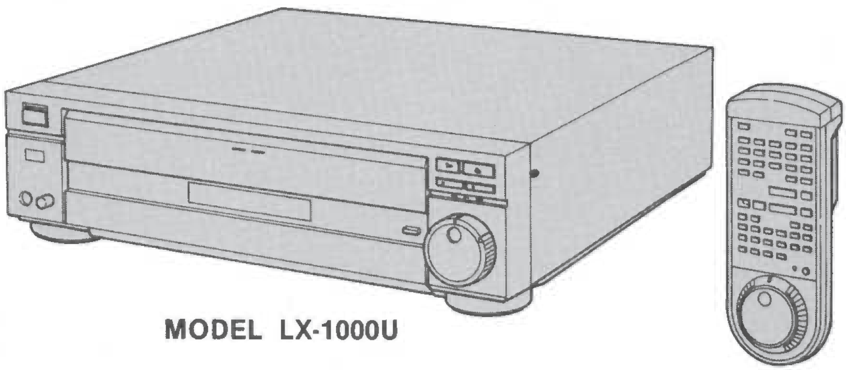
Service Manual

General Description
Adjustment Procedures
Block / Schematic Diagrams
Exploded Views / Parts List

Multi Laser Player

Panasonic

LX-1000U



MODEL LX-1000U

SPECIFICATIONS

ITEM	SPECIFICATIONS
Power Source	AC 120 V, 50－60 Hz
Power Consumption	48 W
Format	Laser Vision Video Disc System, Compact Disc with Video and Compact Disc Digital Audio System
Weight	25.4 lb (11.5 kg)
Dimensions (W×H×D)	16-15/16″×5-3/32″×16-7/8″ (430×129×429 mm)
Operating Temperature	+5℃～35℃
Operating Humidity	5%～90%
Usable Discs	(1) Laser Vision Disc 12″ (30 cm) Long Play Disc (CLV); 1800～600 rpm, 2-hour playback (max.) for both sides 12″ (30 cm) Standard Disc (CAV); 1800 rpm, 1-hour playback (max.) for both sides 8″ (20 cm) Long Play Disc (CLV); 40-minute playback (max.) for both sides/ 20-minute playback (max.) for single side 8″ (20 cm) Standard Disc (CAV); 28-minute playback (max.) for both sides/ 14-minute playback (max.) for single side (2) Compact Disc 5″ (12 cm) Disc; 500～200 rpm, 74-minute playback (max.) for single side 3″ (8 cm) Disc; 500～300 rpm, 20-minute playback (max.) for single side

ITEM	SPECIFICATIONS
Usable Discs	(3) Compact Disc with Video Video Section; 2700～1800 rpm, 5-minute playback (max.) for single side Audio Section; 500～300 rpm, 20-minute playback (max.) for single side
Video Signal Output Level	1.0 Vp-p (at 75 ohm, synchronizing load)
S-VIDEO Output Level (Y/C Separate Signal Output)	Y Output; 1.0 Vp-p (When loading 75 ohm, synchronizing load) C Output; 0.286 Vp-p (When loading 75 ohm, synchronizing load)
Audio Signal Output Level	(1) Digital Audio Output Level 200 m Vrms (1 kHz, －20 dB) (2) Analog Audio Output Level 200 m Vrms (1 kHz, Modulated 40%)
Digital Audio Signal Output Characteristic	(1) Frequency Response: 4 Hz～20 kHz (EIAJ) (2) S/N Ratio: 110 dB (EIAJ) (3) Dynamic Range; 98 dB (EIAJ) (4) Channel Separation; 110 dB (EIAJ) 1 kHz (5) Wow and Flutter; Below measurable limit (6) Total Harmonic Distortion; 0.0027% (EIAJ) 1 kHz (7) Harmonic Distortion; 0.0018% 1 kHz
Headphone Output Level	32 ohm (30 mW), Impedance; more than 8 ohm

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

***MASH**
- MASH (Multi-Stage Noise Shaping) is an effective oversampling D/A conversion technique which realizes a high S/N ratio and needs no highly complex manufacturing processes such as a laser trimming.
- MASH is trademark of NTT (Nippon Telegraph and Telephone Corporation).

Panasonic®

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service this model.
Section 1 presents you with some general information of features and controls, enabling you to become familiar with each function.
Section 2 contributes to your mechanical and electrical adjustment as well disassembly and replacement procedures.
Section 3 contains block diagrams which offers you information for checking and understanding each circuit. Schematic diagrams which give you detailed information such as waveforms, voltage data, function e.t.c...
Section 4 contains exploded views and parts list.
Please place orders using the parts list and not the drawing reference numbers.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Contents

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shileds are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1MΩ and 5.2MΩ. When the exposed metal does not have a return path to the chassis, the reading must be ∞.

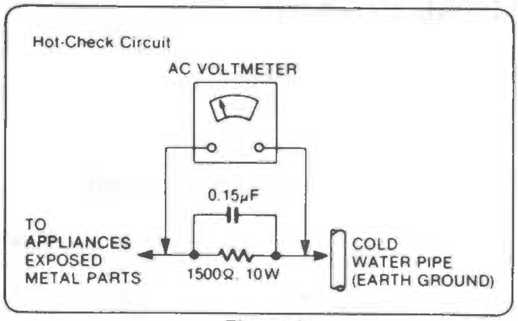


Figure 1

LEAKAGE CURRENT HOT CHECK (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

PREVENTION OF ELECTRO STATIC DISCHARGE (ESD) TO ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap,which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aliminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

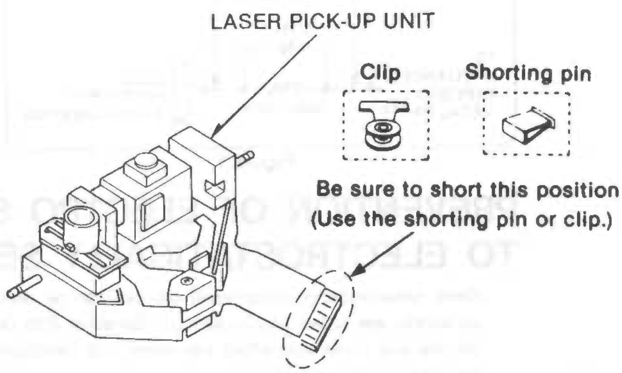
PRECAUTION OF LASER DIODE

CAUTION: This unit utillzes a class 3 laser. Invisible laser radiation is emitted from the optical pick up lens when the unit is turned on:

1. Do not look directly into the pick up lens.
2. Do not use optical instruments to look at the pick up lens.
3. Do not adjust the preset variable resistor on the optical pick up.
4. Do not disassemble the optical pick up unit.
5. If the optical pick up is replaced, use the manufactures specified replacement pick up only.
6. Use of control or adjustment or performance of procedures other than those specified herin may result in hazardous radiation exposure.

HANDLING PRECAUTIONS FOR OPTICAL PICKUP

The laser diode in the optical pickup may break down due to potential difference caused by static electricity of clothes or human body.
So be careful of electrostatic breakdown during repair of the optical pickup.



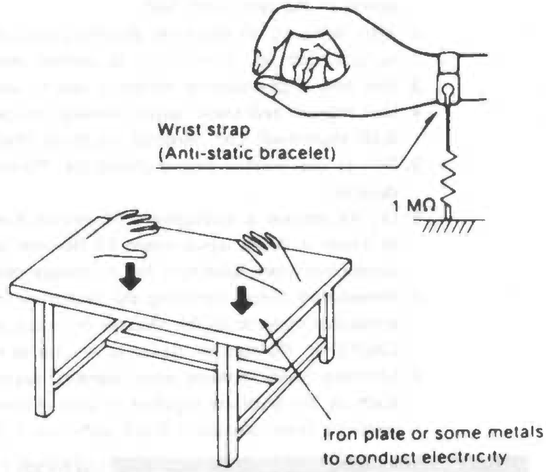
• Handling of optical pickup

1. Do not subject the optical pickup to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode an anti-static shorting pin is inserted into the flexible board (FPC board)
   When removing or connecting the short pin finish the job in as short time as possible.
3. Be careful not to apply excessive stress to the flexible board (FPC board)

• Grounding for electrostatic breakdown prevention

1. Human body grounding
   Use the anti-static wrist strap to discharge the static electricity from your body.
2. Work table grounding
   Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed and ground the sheet.

Caution:
The static electricity of your clothes will not be grounded through the wrist strap So take care no to let your clothes touch the optical pickup.



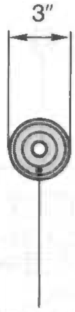
SECTION 1
GENERAL DESCRIPTION

DISCS THAT CAN BE PLAYED BACK

This Multi Laser Disc Player makes it possible to play back the following six kinds of laser discs without any adaptor.

CD (Compact Disc) Single
[Single side only]

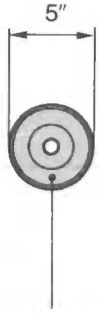
3″



Digital sound
(20 minutes max.)

CD
[Single side only]

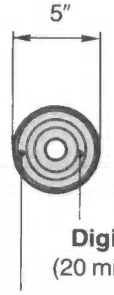
5″



Digital sound
(74 minutes max.)

CD-V (Compact Disc-Video)
[Single side only]

5″

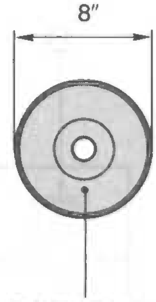


Digital sound
(20 minutes max.)

Digital sound
+
Picture
(5 minutes max.)

LD (Laser Videodisc) Single
[Single side only]

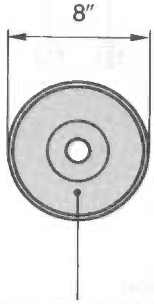
8″



Digital/Analog sound
+
Picture
(CAV: 14 minutes max.)
(CLV: 20 minutes max.)

LD
[Both sides]

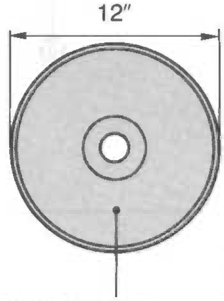
8″



Digital/analog sound
+
Picture
(CAV: 14 minutes max. for single side)
(CLV: 20 minutes max. for single side)

LD
[Both sides or single side only]

12″



Digital/analog sound
+
Picture
(CAV: 30 minutes max. for single side)
(CLV: 60 minutes max. for single side)

- Only discs bearing one of the marks shown on the right can be used with this unit.
- CED and VHD system video discs cannot be used with this unit.
- This unit uses the NTSC color TV system. Discs marked with other color TV systems (PAL, SECAM) cannot be played back.
- This unit does not correspond to the CD Graphics and CD-ROM specifications.
- Never use any discs whose back is coated with aluminum.

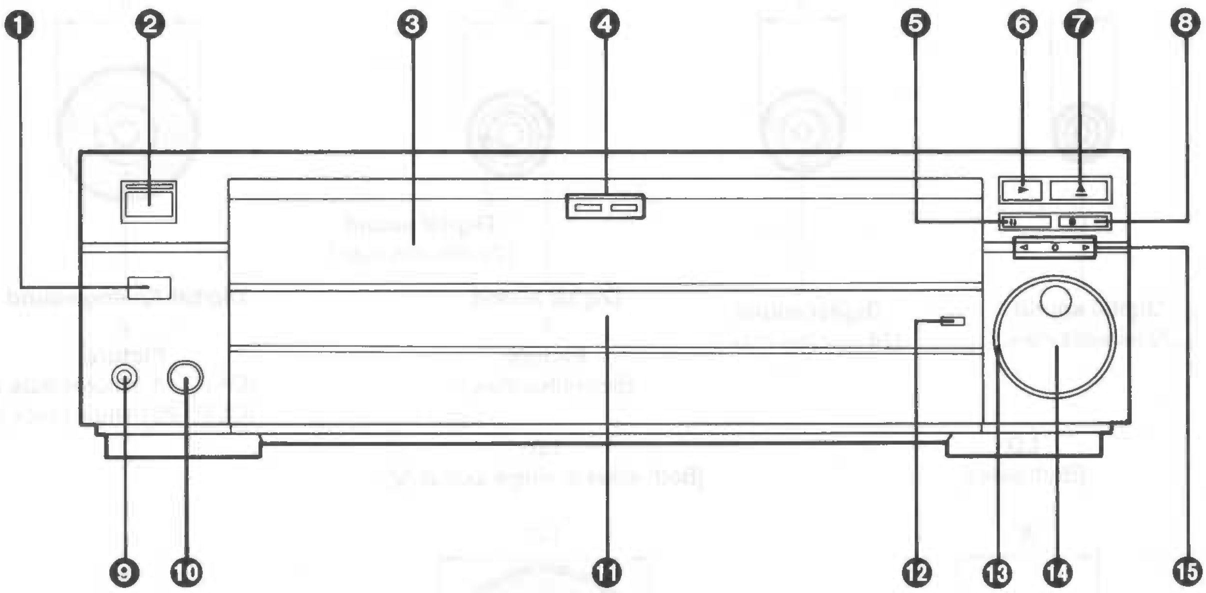
Note:
Your attention is drawn to the fact that recording, broadcasting, showing, playing to public and rental of prerecorded discs and tapes or other published or broadcast material may infringe copyright laws.

LASER DISC
digital AUDIO
LD SINGLE
digital SOUND
CD VIDEO
COMPACT disc DIGITAL AUDIO

Controls And Components

The explanations of function in this manual are mainly performed with the Remote Control. Therefore, the page numbers indicated below refer to operations performed with the Remote Control.

Front



Control Section

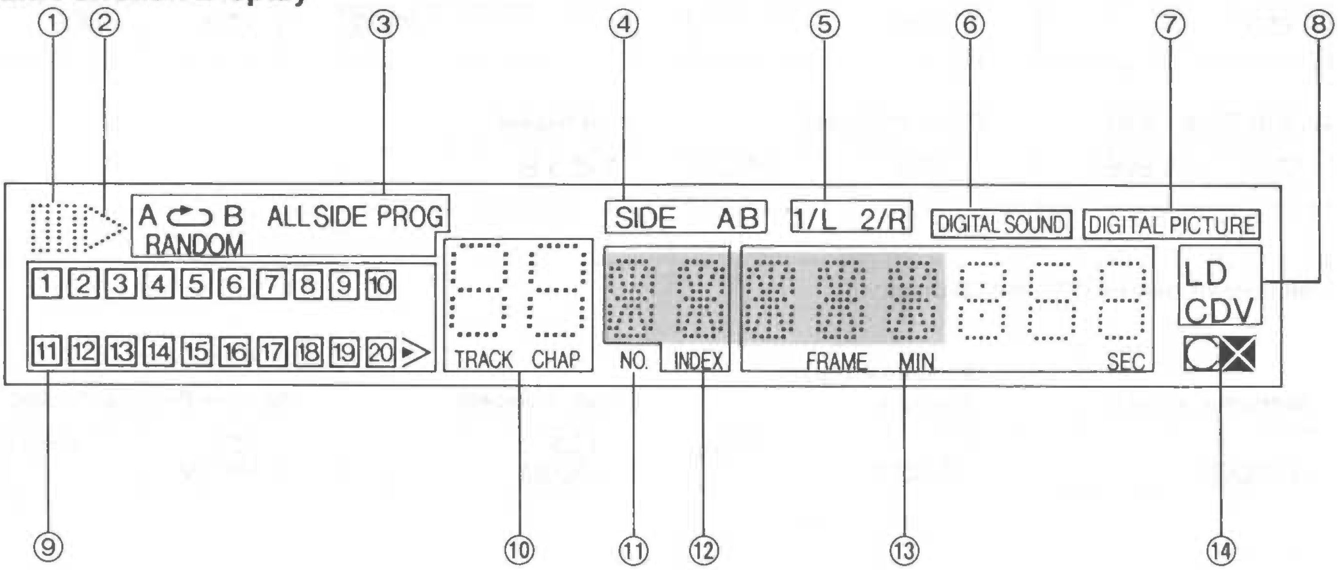
No.	Description
1	Remote Control Receiver
2	Power On/Off Button with Power Indicator
3	Disk Tray
4	Side Indicator
5	Pause Button
6	Play Button
7	Open/Close (Play) Button
8	Stop Button
9	Headphone Jack •Connecting headphone to this jack allows bilingual and stereo sound reproduction.

No.	Description
10	Headphones Volume Control •To adjust sound level.
11	Multi-Function Display
12	Button to Open Control Panel
13	Shuttle Ring
14	Jog Dial
15	Jog/Shuttle Indicator Lamp

WARNING
It is not recommended to listen with headphones for a long time with the volume turned extremely high.

Controls And Components (continued)

Multi Function Display



① **Pause Indicator**

② **Play Indicator for All Playback Modes**

③ **Playback Mode Indicator**

④ **Disc Side Indicator (Only for LD)**

⑤ **Audio Output Mode Indicators**

⑥ **Digital Sound Indicator (while it is being output)**

⑦ **Digital Picture Indicator**

⑧ **Disc Type Indicator**

⑨ **Chapter/Track Number Indicator**
- **LD Disc:** The number of the chapter being played back is displayed.
- **CDV or CD Disc:** The number of programs recorded on the disc is displayed and the number of tracks will go out one by one as their playback is completed.
- The ">" Mark will be displayed if there are more than 20 chapters or tracks on the disc. During playback of the 21st or subsequent tracks, the "⊳" Mark will be displayed.

Note:
There are some LDs which include chapter number "0"; however, this number cannot be displayed.

⑩ **Chapter/Track Number Indication**

⑪ **Program Number Indication**

⑫ **Index Number Indication**

⑬ **Frame Number/Time Number Indication**

⑭ **CX System ON Indicator**

The shaded part of the display also indicates the messages explained on the bottom half of the right page.

Playback Mode Display

Custom Index Playback

A ↺

Chapter/Track Repeat

↺

Program Playback

PROG

Side Repeat

↺ SIDE

All Side Repeat [LD]

↺ ALL SIDE

Program Repeat

↺ PROG

A–B Repeat

A ↺ B

Indications only for CDV and CD Discs

Random Playback

RANDOM

Random Program Playback

PROG RANDOM

Random Repeat

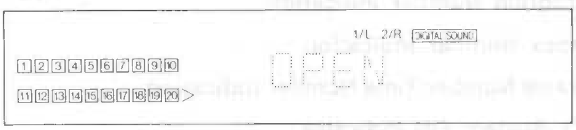
↺ RANDOM

Random Program Repeat

↺ PROG RANDOM

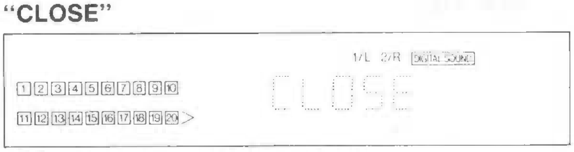
Message Display

"OPEN"



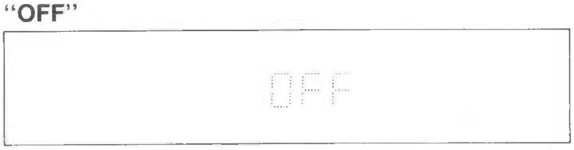
●The Disc Tray is being opened.

"CLOSE"



●The Disc Tray is being closed.

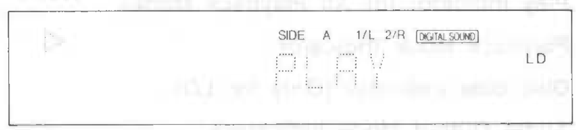
"OFF"



●It will be displayed when the power is turned off.

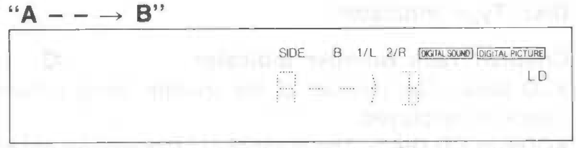
Indication for LD Discs Only:

"PLAY"



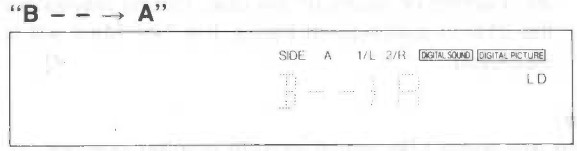
●Playback will start.

"A – – → B"



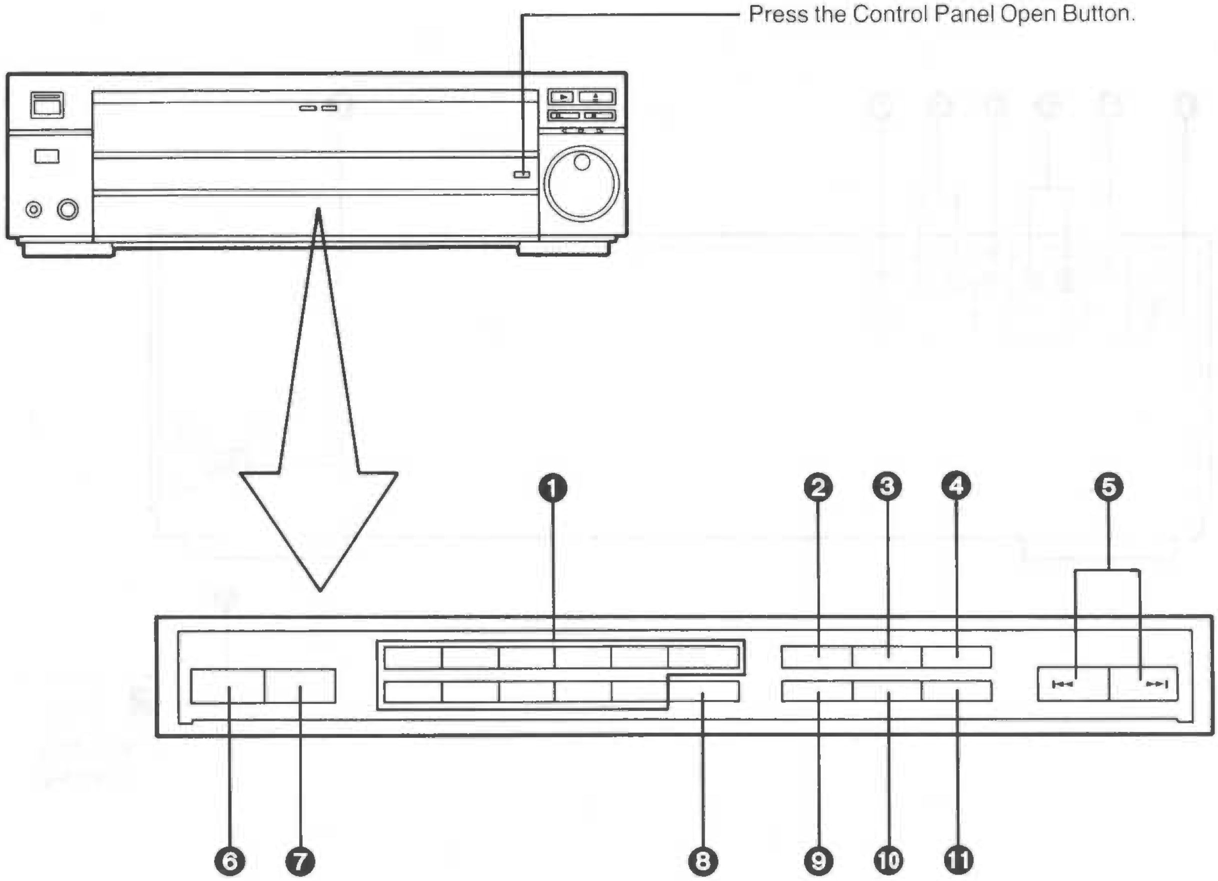
●While the playback is changed over from side A to side B.
(The arrow moves from left to right.)

"B – – → A"



●While the playback is changed over from side B to side A.
(The arrow moves from left to right.)

Controls And Components (continued)

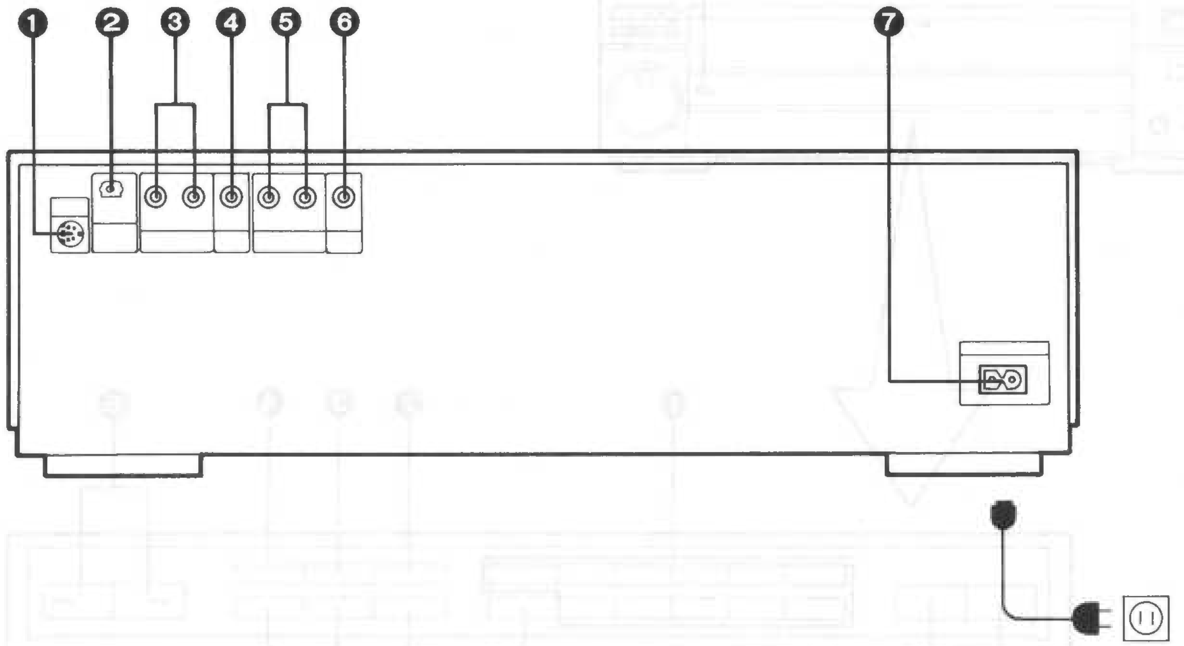


Control Section

No.	Description
1	Numeric Buttons
2	Program Button
3	Recall Button
4	Random Button
5	Skip Button
6	Side A Button

No.	Description
7	Side B Button
8	Mode Button
9	Clear Button
10	Edit Button
11	Repeat Button

Rear

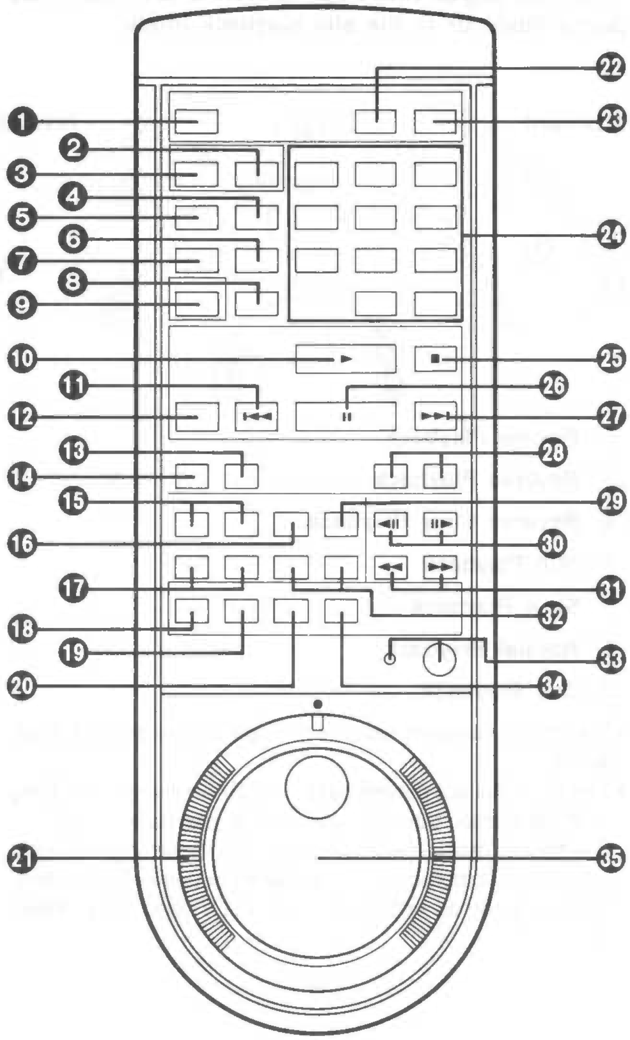


No.	Description
1	S-Video Output Jack
2	Optical Link Output Connector
3	Audio Output 2 Jack
4	Video Output 2 Jack

No.	Description
5	Audio Output 1 Jack
6	Video Output 1 Jack
7	AC Power Socket

Controls And Components (continued)

Remote Control

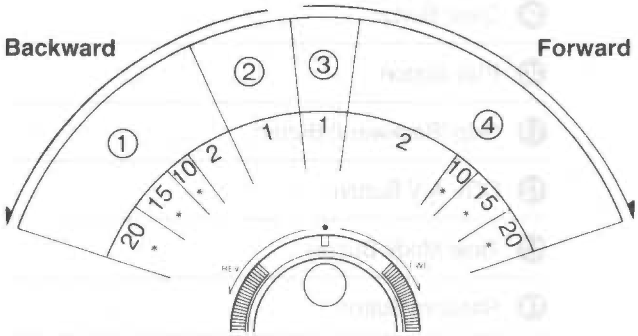


No.	Description
1	Power On/Off Button
2	Side B Button
3	Side A Button
4	Edit Button
5	Repeat Button
6	Recall Button
7	A-B Repeat (Custom Index) Button
8	Program Button
9	Clear Button
10	Play Button
11	Skip (Backward) Button
12	CDV A/V Button
13	Time Mode Button
14	Random Button
15	Strobe Buttons
16	Still & Sound Button
17	Speed Selector Buttons
18	D/A • CX Button
19	Audio Selector Button
20	Audio Level Button
21	Shuttle Ring
22	Mode Button
23	Open/Close (Play) Button
24	Numeric Buttons
25	Stop Button
26	Pause Button
27	Skip (Forward) Button
28	Index Skip Buttons
29	Art Button
30	Still/Step Advance (Reverse) Buttons
31	Scan Buttons
32	Multi Speed Buttons
33	Jog/Shuttle Mode Button with Indicator Light
34	Display (On-Screen Indication) Button
35	Jog Dial

[LD] [CDV (Video Part)]

The playback speeds at the Shuttle Ring positions are different when the Jog/Shuttle Mode Button is turned during playback and when it is turned in the pause or still playback mode.

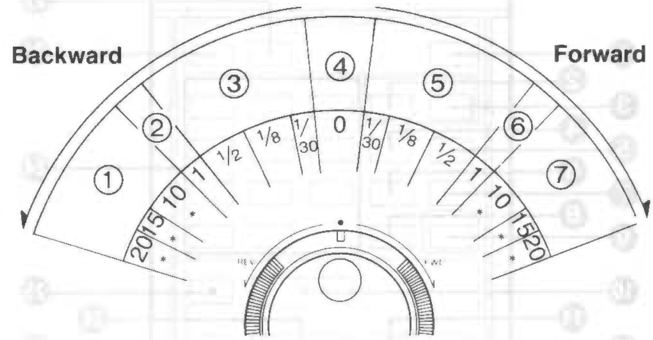
When the Jog/Shuttle Mode Button is turned during playback



① **Review Playback**
② **Reverse Playback**
③ **Normal Playback**
④ **Cue Playback**

- The above numbers indicate multiples of normal playback speed.
- The sound is played back only when the Shuttle Ring is in its center position and in the playback mode.
- The figures marked with asterisks (*) indicate approximate multiples (fractions) of normal speed in case of LD (CAV). These figures do not apply to LD (CLV) and CDV (Video Part).

When the Jog/Shuttle Mode Button is pressed in the pause mode or in the still playback mode

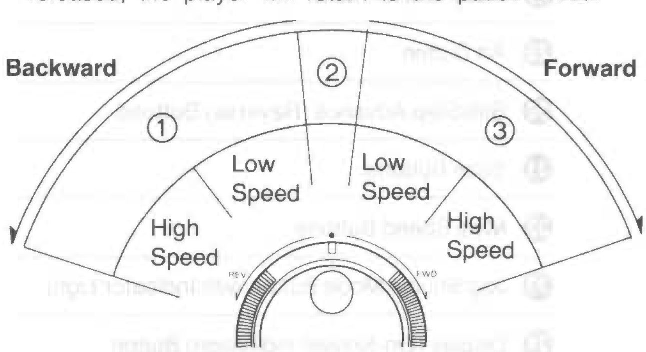


① **Review Playback**
② **Reverse Playback**
③ **Reverse Slow Playback**
④ **Still Playback**
⑤ **Slow Playback**
⑥ **Normal Playback**
⑦ **Cue Playback**

- The above numbers indicate multiples of normal playback speed.
- The sound is not played back only when the Shuttle Ring is in its center position and in the playback mode.
- The figures marked with asterisks (*) indicate approximate multiples (fractions) of normal speed in case of LD (CAV). These figures do not apply to LD (CLV) and CDV (Video Part).

[CD] [CDV (Audio Part)]

- When the Jog/Shuttle Mode Button is turned during normal playback, the Multi Laser Disc Player returns to the playback mode when the Jog/Shuttle Mode Button is released.
- When the Multi Laser Disc Player is in the pause mode and the Jog/Shuttle Mode Button is turned and than released, the player will return to the pause mode.



① **Review Playback**
② **Playback or Pause**
③ **Cue Playback**

Art Playback [LD] [CDV (Video Part)]

The picture is processed digitally and a special effects can be obtained.

Press the Art Button during playback.

- The playback continues, but the picture will be superimposed with a special effect.

To change the degree of the special digital effect, press the Art Button.

Normal ⟶ Effect 1 ⟶ Effect 2 ⟶ Effect 3 (Effect 3 returns to Normal)

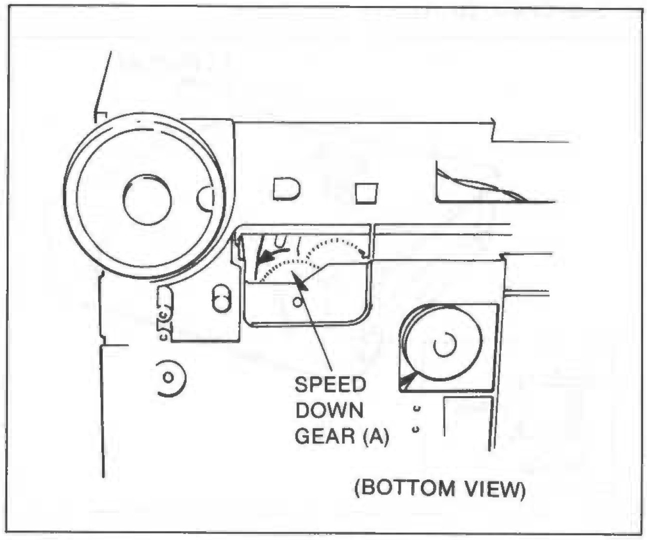
SERVICE CAUTION

HOW TO MANUALLY EJECT DISC TRAY

If the unit is not operating correctly and the disc tray can not be ejected properly, it's possible to eject tray manually as follows.

NOTE:
Work with extreme care when there is a disc inside tray compartment and do not turn unit on it's side when following step 2 of this procedure.

(1) Remove Bottom Plate (Refer to Fig. D3).
(2) By slightly raising right side of unit and locating speed down Gear (A) turn gear counter clockwise slowly until the tray has fully ejected.



Section 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

This flowchart indicates disassembly steps of the cabinet parts and circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

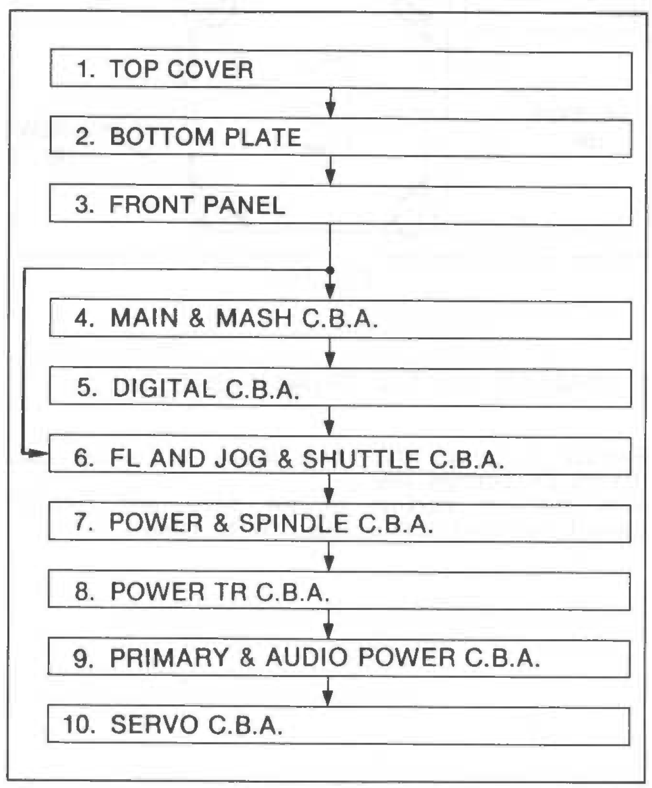


Fig. D1

1. REMOVAL OF THE TOP COVER

Remove 4 screws (A), then carefully lift the rear of Top Cover to remove.

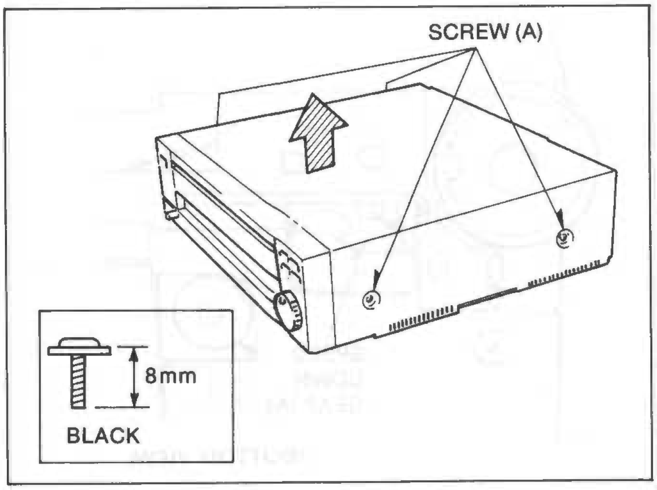


Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Place the unit upside down so that the bottom side faces upward.
Then remove 11 screws (B).

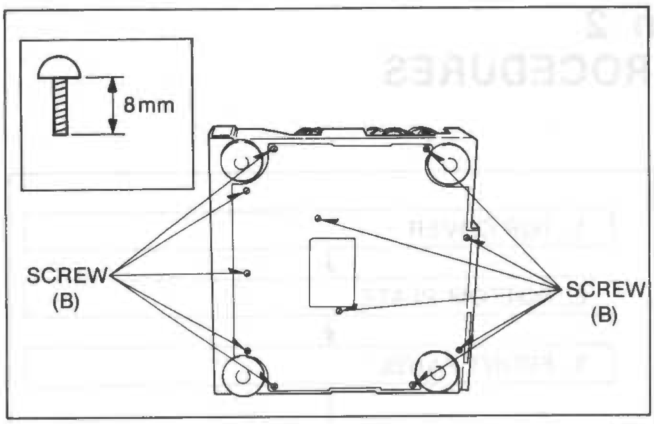


Fig. D3

3. REMOVAL OF THE FRONT PANEL

Remove 3 screws (C) and unlock 3 locking tabs (E) on the bottom side.
Hold the top portion of the panel and turn it toward the front side of the unit to remove.

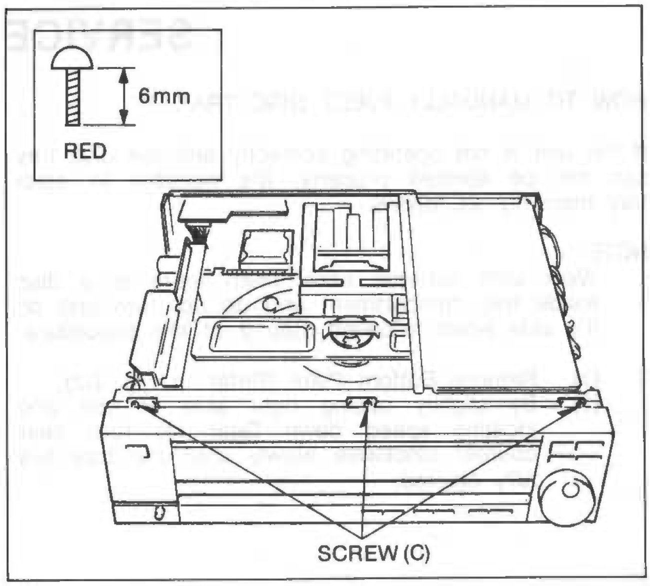


Fig. D4

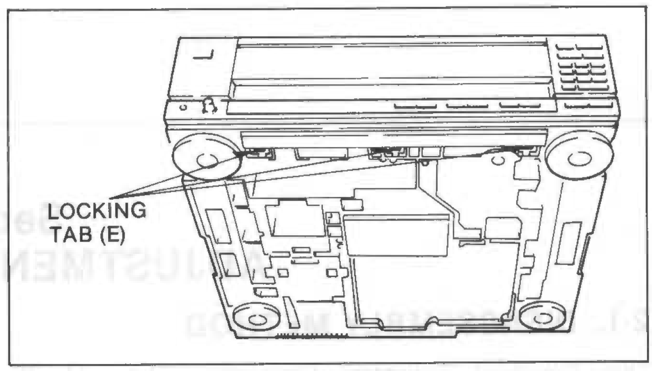


Fig. D5

4. REMOVAL OF THE MAIN & MASH C.B.A.

4–1. Remove 6 screws (E) on the C.B.A. and then remove 4 screws (F) on the Rear Panel.
Pull the Main C.B.A. slightly forward then carefully lift up.

4–2. Remove 2 screws (O) to remove Mash C.B.A.

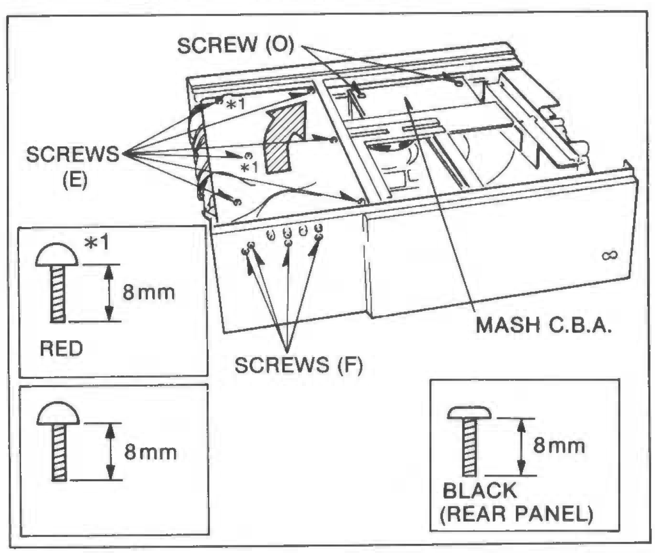


Fig. D6

5. REMOVAL OF THE DI6ITAL C.B.A.

Remove 2 screws (P) then carefully lift it.

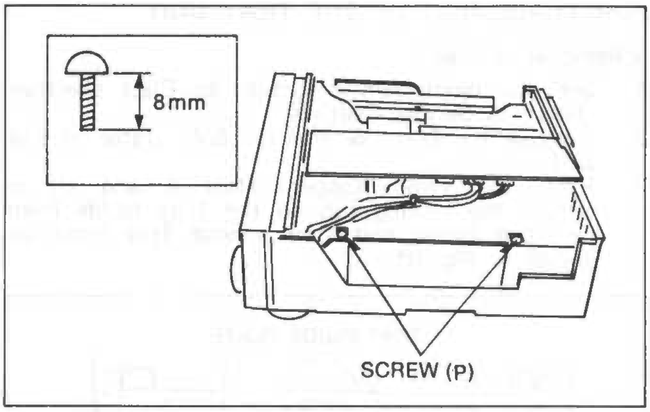


Fig. D7

6. REMOVAL OF THE INDICATON PANEL, OPERATION AND JOG & SHUTTLE C.B.A.

Remove 4 screws (G) on the Indication C.B.A. and 3 screws (H) on the JOG & SHUTTLE C.B.A.

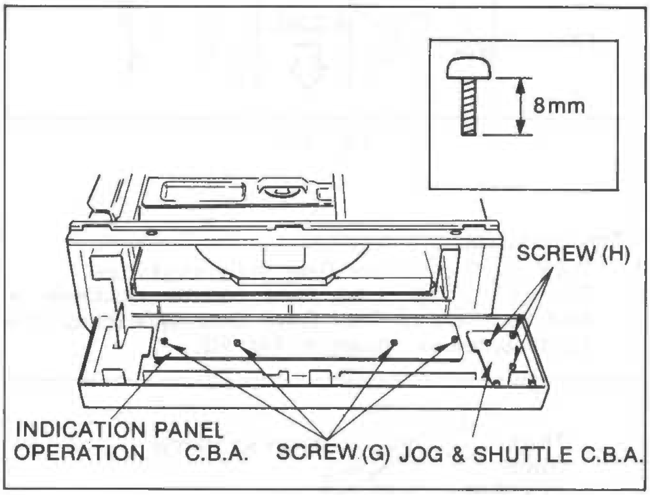


Fig. D8

Remove 2 screws (D) to remove Operation C.B.A.

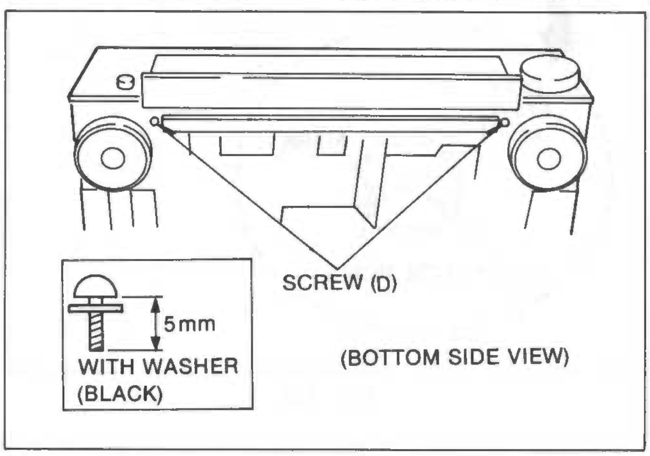


Fig. D9

7. REMOVAL OF THE POWER & SPINDLE C.B.A.

Remove 3 screws (I), then carefully lift the Power & Spindle C.B.A..

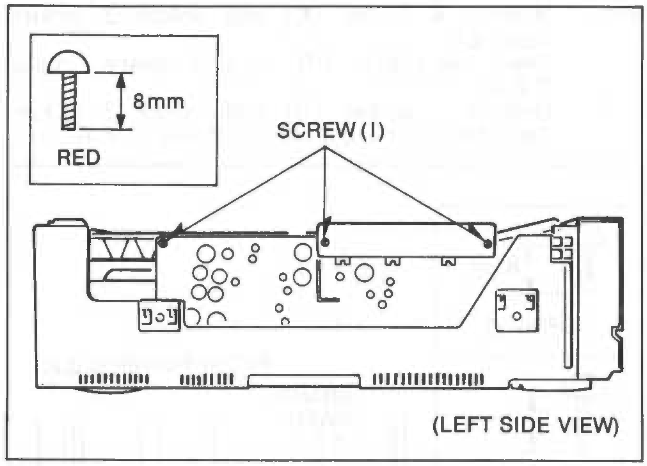


Fig. D10

8. REMOVAL OF THE POWER TR. C.B.A.

Remove 5 screws (J), then take out the Power TR C.B.A..

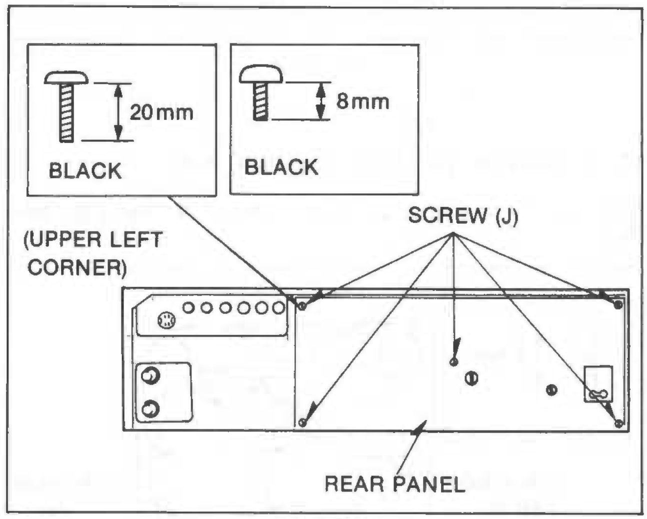


Fig. D11

9. REMOVAL OF THE PRIMARY & AUDIO POWER C.B.A.

9–1. Set the mechanism condition to Eject position. (Refer to Service Caution).

9–2. Remove 4 screws (K) and unlock 2 locking tabs (L). Then, carefully lift the Primary Power C.B.A..

9–3. Remove 2 screws (Q) and unlock 2 locking Tabs (R) to remove Audio Power C.B.A..

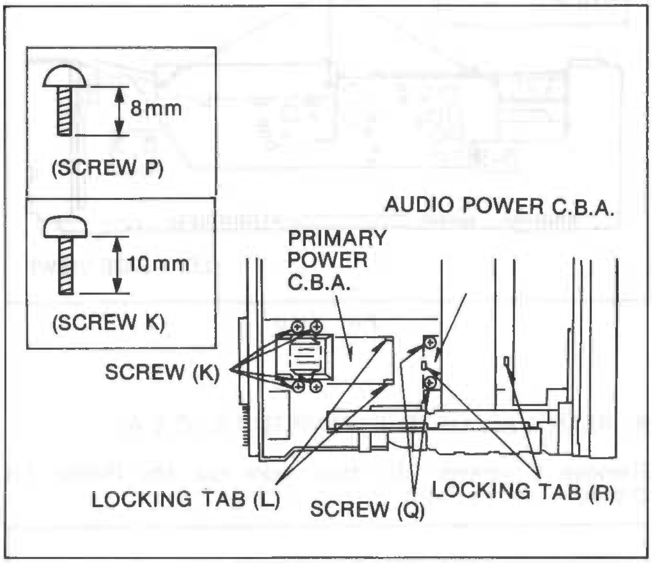


Fig. D12

10. REMOVAL OF THE SERVO C.B.A.

Remove 2 screws (M) and unlock 4 locking tabs (N).

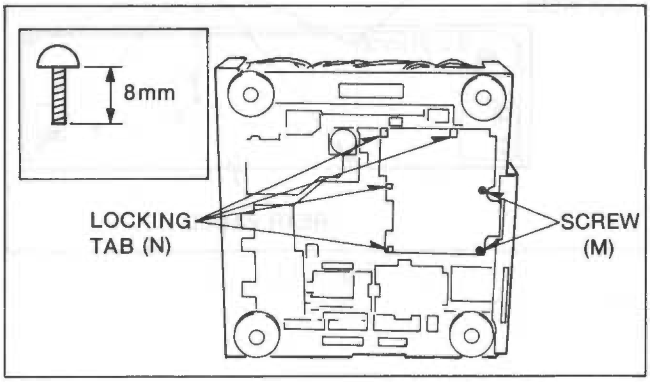


Fig. D13

2-2. REPLACEMENT OF MECHANICAL PARTS

1. REPLACEMENT OF THE TRAY UNIT

<Removal of Tray>

1. Set the mechanism condition to Eject position. (Refer to Service Caution).
2. Remove the Main & Mash C.B.A. (refer to Fig. D6).
3. Press the Tray Stopper (Hole A and B) to unlock the locking tab on the Tray Guide Plate by using Driver and then remove Tray Plate as shown in Fig. R1.

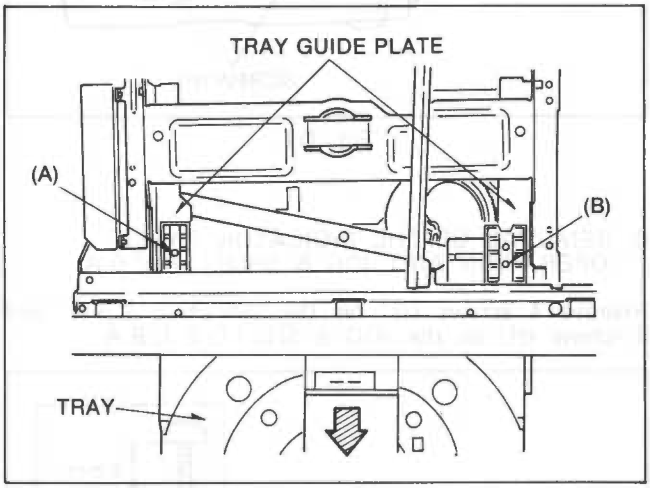


Fig. R1

<Tray Installation>

4. Turn the Tray Drive Gear fully clockwise.
5. Turn the Tray Drive Gear counter clockwise so that the mark on Tray Drive Gear appears on the right corner as shown in Fig. R2.

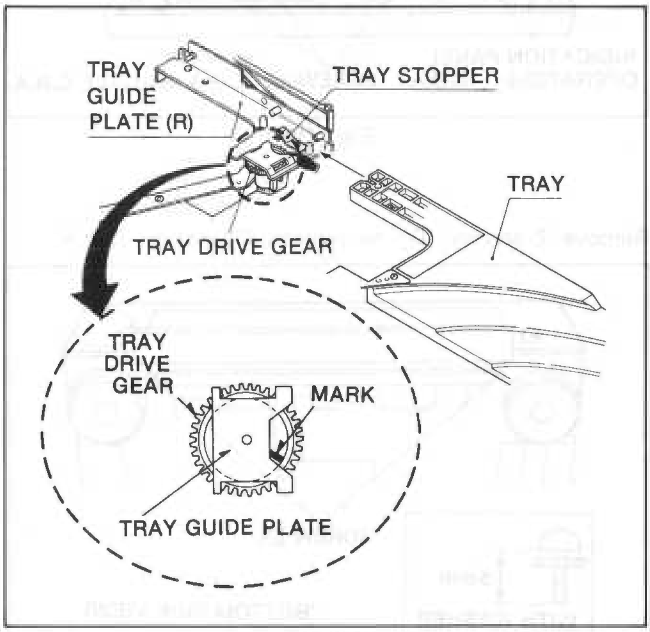


Fig. R2

6. Install the Tray so that the mark (A) of the Tray Drive Gear lines up with the notch mark (B) of Tray as shown in Fig. R3.

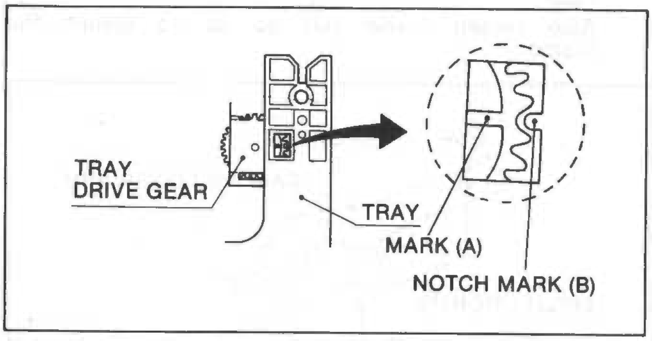


Fig. R3

7. Confirm that both Tray stopper Tabs are locked as shown in Fig R1.

2. REPLACEMENT OF THE TRAY DRIVE SECTION

1. Remove the Tray unit (Refer to Fig. R1)
2. Remove the Front Panel Unit (Refer to Fig. D4 and D5)
3. Remove 1 screw (A) on the Main C.B.A. Angle Support Bracket and 4 screws (B) on the Front Panel Angle Support Bracket to remove the Main C.B.A., Angle Bracket and Front Panel Angle Support Braket.
4. Remove 2 screws (C) on the Rack Guide Plate (L), 3 screws (D) and spring on the Rack Guide Plate (R).

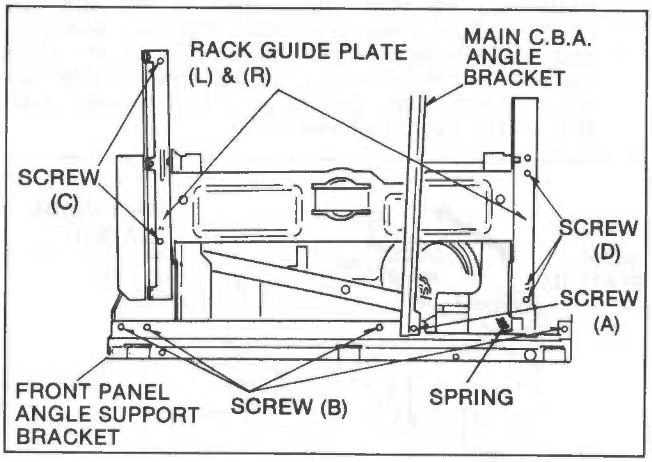


Fig. R4

5. Remove 2 springs and then take out the Clamp Plate.
6. Pull out the Rack Plate (L) and (R), as shown in Fig. R5.
7. When removing the Shutter Plate, carefully note it's disassembly, it's reinstallation is important.

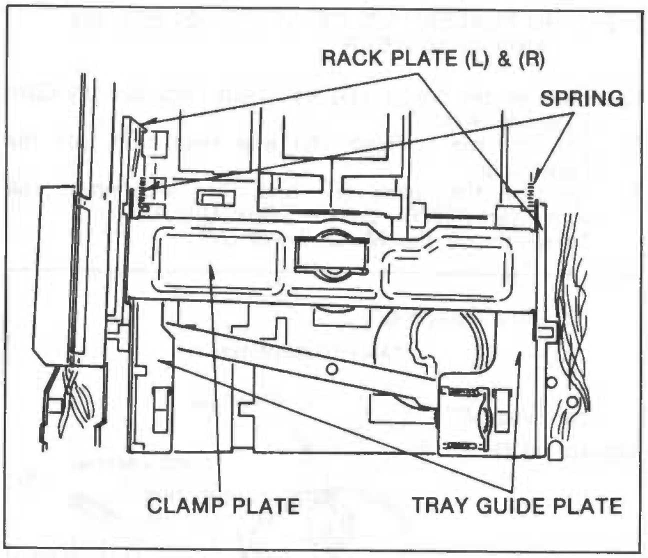


Fig. R5

2–1. REPLACEMENT OF THE LOADING MOTOR

1. Remove 2 screws (H) and then take out the Loading Motor from bottom side.

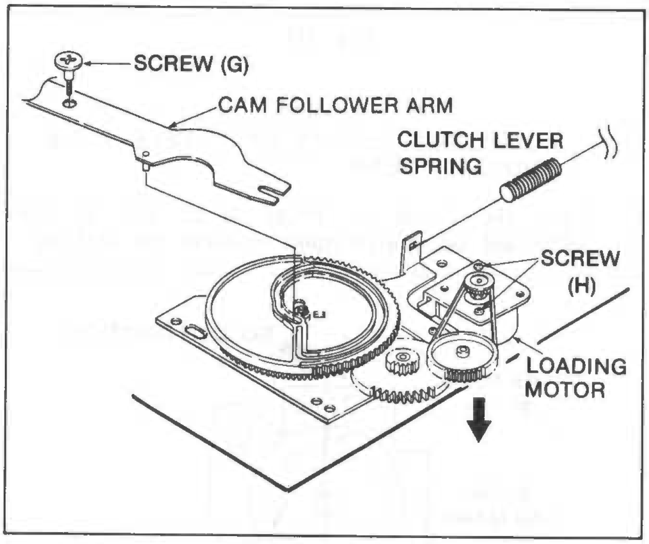


Fig. R6

2–2. REPLACEMENT/ADJUSTMENT OF MODE SELECT SW AND CAM GEAR

Due to the intricate working relation ship between both the mechanical mechanisms and electrical circuits of this unit, therefore the relationship between the mode select switch and the cam Gear, determines all further mechanical movement of parts such as levers, gears and other components. For this reason if alignments on adjustments are improperly performed, the deck may possibly unloaded or automatically stop. It will also result in damage to mechanical and electrical parts.

2-2-1. REPLACEMENT OF MODE SELECT SW AND CAM GEAR

1. Remove the Screw (G) and then take out the Cam Follower Arm.
2. Remove the C-Ring (A) and then take out the Cam Gear.
3. Remove the screw (B) and then disconnect the connector P26201 on the Main C.B.A.. Then remove the Mode Select SW.

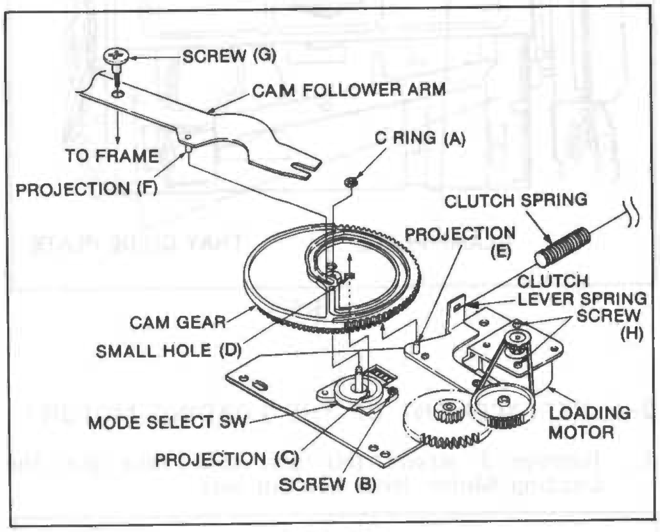


Fig. R7

2-2-2 ALIGNMENT OF THE MODE SELECT SW AND CAM GEAR

1. Turn the inside of Mode Select SW so that alinement tab marks meet together (A) and (B).

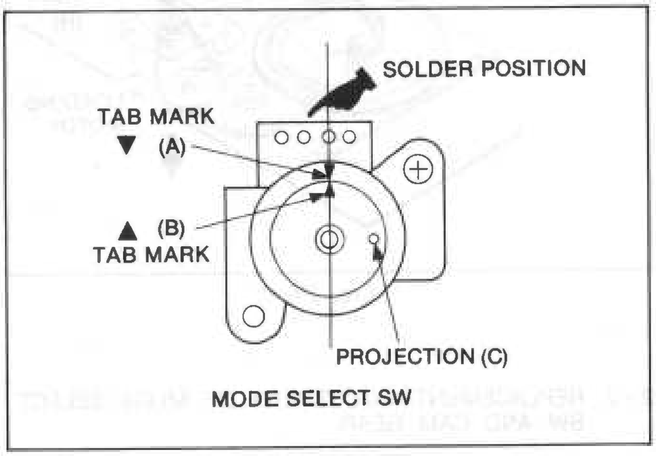


Fig. R8

2. Install the Cam Gear with the half slot side showing so that Small Hole (D) on the Cam Gear meets Projection (C) on the Mode Select SW as shown in Fig. R7. Then install the C-Ring (A) to mount Cam Gear.
3. Turn the Cam Gear fully to clockwise. Then, install the Cam Follower Arm so that the projection (F) meets the inner slot of Cam Gear. Also install Screw (G) so as to mount the Frame.

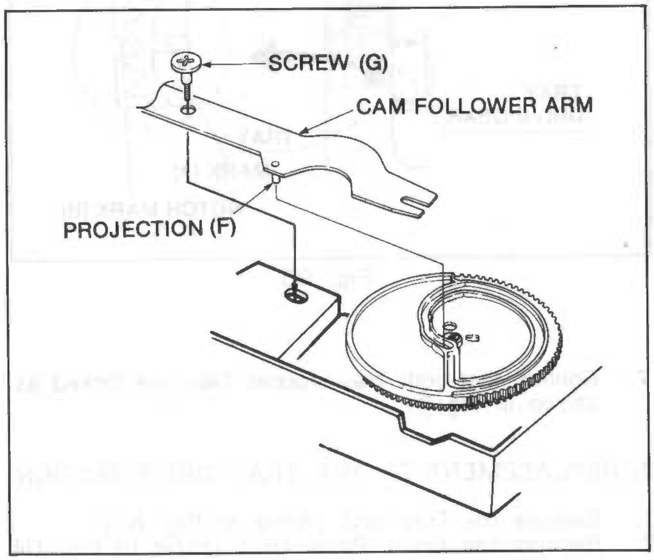


Fig. R9

4. This should be installed first, set the Tray Guide Plate (L) to Rack Plate (L) so that the Projection (G) and (H) of Tray Guide Plate (L) meets (A) and (B) of the Rack Plate (L). Then install the Tray Guide Plate (L) and Rack Plate (L) so that the projection (I) and (J) of Tray Guid Plate (L) meets Hole (C) and (D), and also Projection (E) meets (F) of the Cam Follower Arm, slowly slide the Rack Plate (L) to confirm that projection (E) engages with (F) of the Cam Follower Arm.

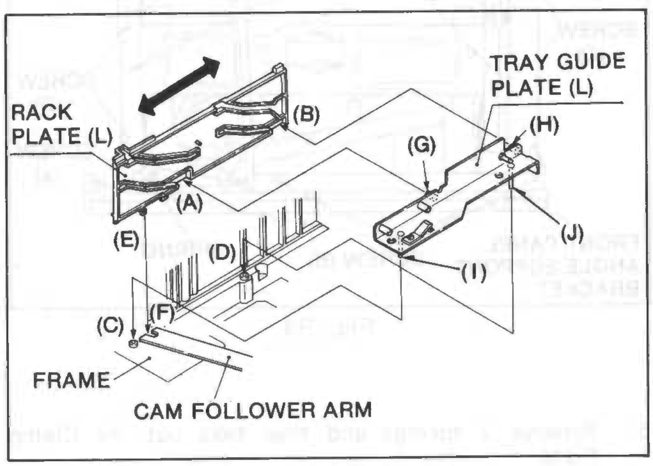


Fig. R10

5. This should be installed first, set the Tray Guide Plate (R) to Rack Plate (R) so that the Projection (Q) and (R) of Tray Guide Plate (R) meets (K) and (H) of Rack Plate (R).
Turn the Tray Drive Gear clockwise so that the projection of Tray Drive Gear set to center as shown in Fig. R12.
Install the hole of the Shutter to projection (A) of the Tray Guide Plate (L).
Then install the Tray Guide Plate (R) and Rack Plat (R) so that the projection (O) and (P) of Tray Guide Plate (R) meets Hole (M) and (N) of the Frame.

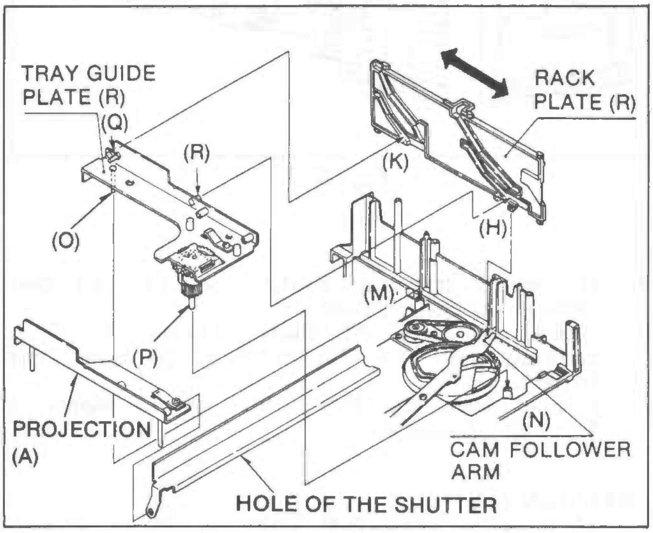


Fig. R11

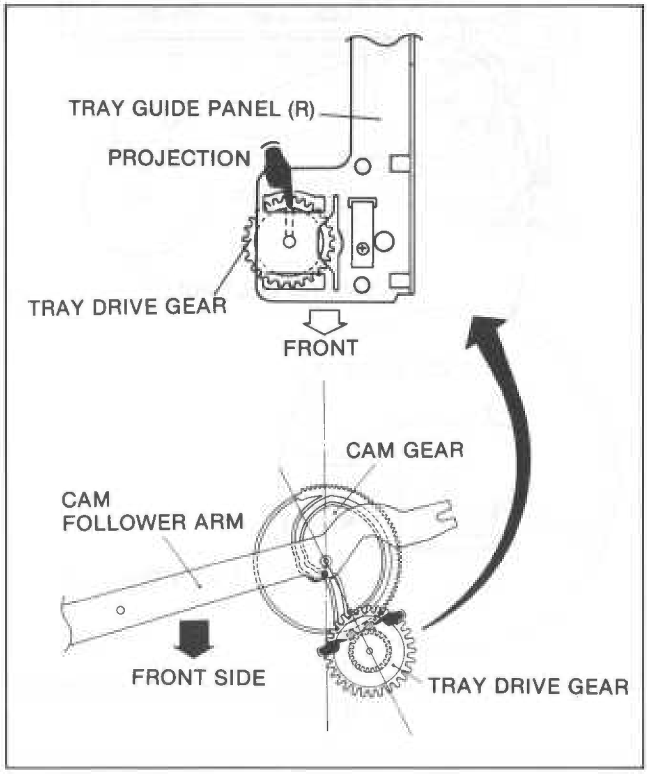


Fig. R12

6. Slowly turn the Cam Gear counter clockwise so that the square position of Rack Plate (L) and (R) meets Flame square position.
Then install the Clamp Plate.
7. Slowly turn the Cam Gear clockwise until reach the Tray Down condition.
Install the Spring (Q) and (R) so as to mount Clamp Plate (S) and (T).

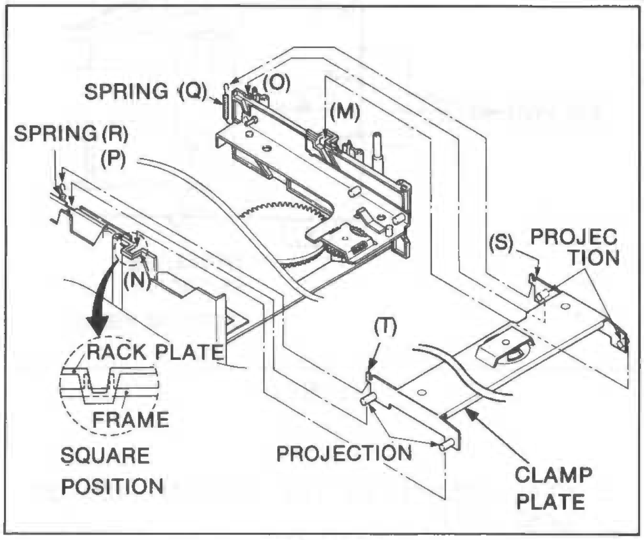


Fig. R13

Then install the Rack Guide Plate (L) and (R) as shown in Fig.R4.

8. Install the Tray as shown in Fig. R2.

3. REPLACEMENT OF THE TRAVERSE SECTION

1. Remove the Servo C.B.A. (Refer to Fig. D11)
2. Remove the Clamp Plate (Refer to Fig. R4 and R5)
3. Remove the Spring (A) and then disconnect connector between Servo C.B.A. and Traverse Section.
4. Remove 4 screws (A) and then carefully take out the Traverse Section.

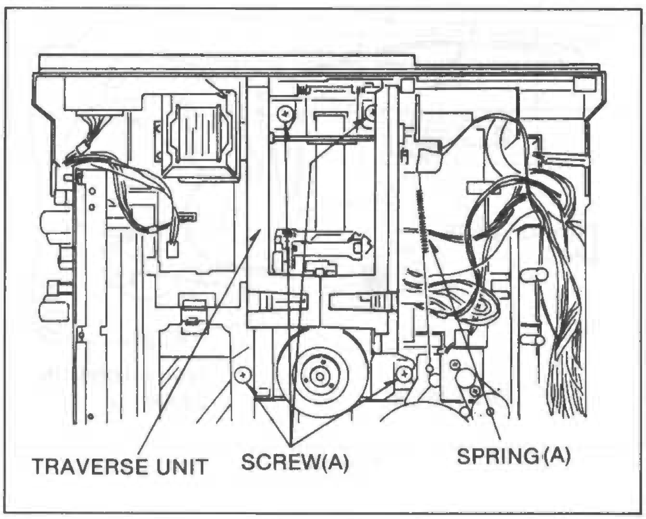


Fig. R14

3-1 REPLACEMENT OF THE SPINDLE MOTOR

1. Remove 3 screws (B) and then remove the Spindle Motor by lifting it.

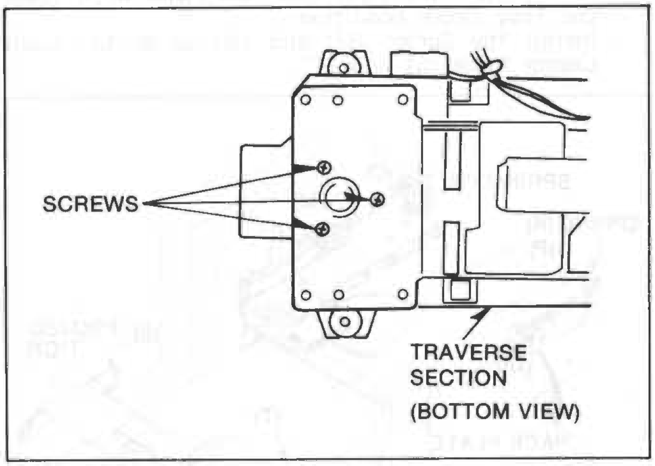


Fig. R15

3-2. REPLACEMENT OF THE OPTICAL PICK UP BASE UNIT

Work with extreme care when replacement of the Optical Pick-Up Base Unit. Then do not touch Focus Lens, Tilt Sensor and Photo Detector during servicing.
After replacement of the Optical Pick Up Base Unit, readjust the Electrical Adjustment that is Optical Pick Up and Servo Circuits.

Reassemble the Optical Pick Up Base Unit to Traverse Unit by following Item 3 through 1 in reverse order.

1. Move a Transmission Gear (A) to center position of frame hole to move the Optical Pick Up Base Unit free.
   Move a optical Pick up Base Unit until screw of the Belt Clamper is seen through Fram and then remove the screw of Belt Clamper.

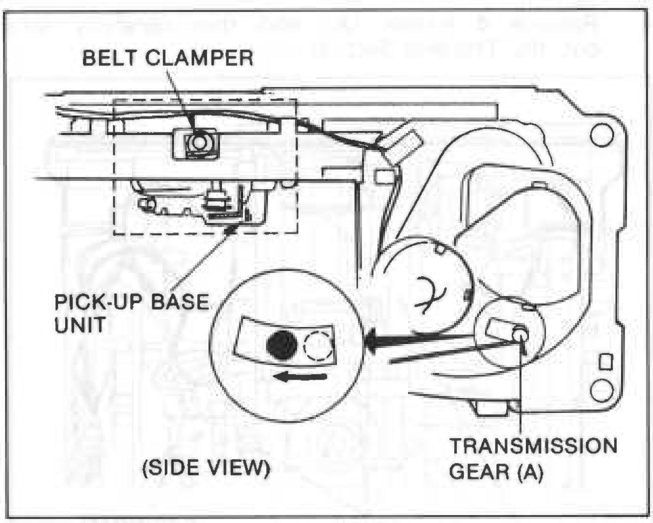


Fig. R16

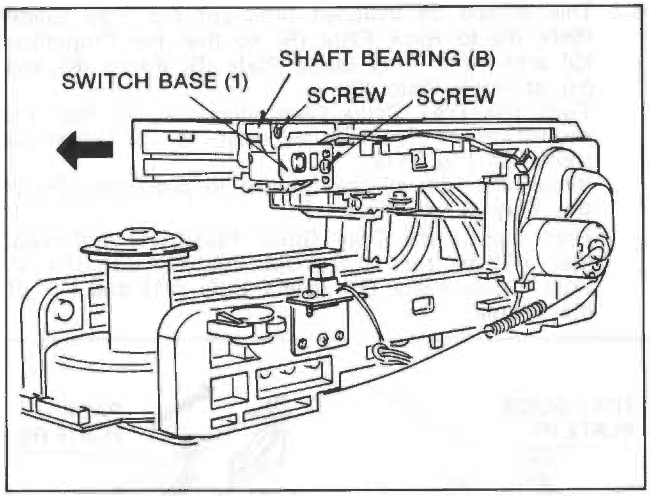


Fig. R17

2. Remove 1 screw of Switch Base (1) and then remove the Switch Base (1).
3. Losen the screw of Shaft Bearing (B). Then carefully pull the Optical Pick Up Base Unit to left.
   Optical Pick Up Base Unit can be separated from the Travarse Unit.

<REASSEMBLE>

1. Move a Forward Belt Pully as shown in Fig. R18.

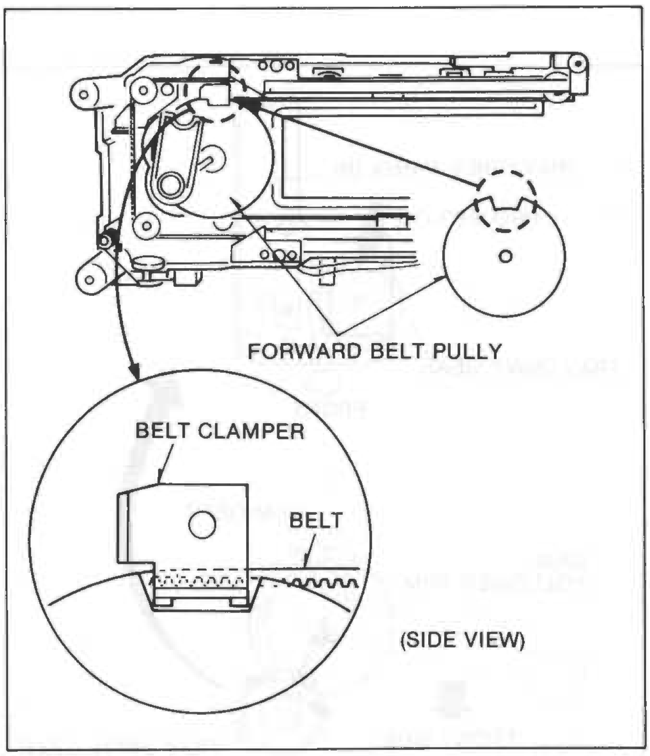


Fig. R18

To move a Forward Belt Pully, move a Transmission Gear (A) to center position of Frame hole as shown in Fig. R16.
Then install the Belt Clamper.

2. Install the Optical Pick Up Base Unit to Traverse Unit and then move a Optical Pick Up Base Unit and Belt Clamper by rotating the Belt Pully so that hole of Optical Pick Up Base aligns with hole of Belt Clamper as shown in Fig. R16.
Screw on a Optical Pick Up Base Unit.

3-3. REPLACEMENT OF THE OPTICAL PICK UP

Reassemble the Optical Pick Up Base (1) by following Item 4 through 1 in reverse order.

1. Remove 3 screws (A) and disconnect connector P25001.
2. Unsolder 2 leads from Height Motor as shown in Fig. R19.
If replace the Pick Up Base Interface C.B.A. ,unsolder 2 leads from Tilt Motor and remove the Switch Base (1).

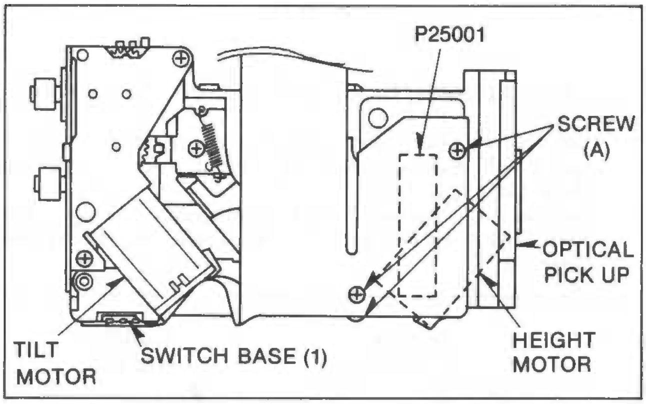


Fig. R19

3. Remove 2 screws (B) and lift the Optical Pick Up a little.
Then remove the Height Motor Base by lifting and pulling to the right.
4. Remove the Height Spring (A), (B), Tilt Tension Spring and Height Joint Plate and then carefully take out the Optical Pick Up.

<REASSEMBLE>

1. Set the Optical Pick Up to Optical Pick Up Base so that the Pin (B) of Optical Pick Up meets the Hole (A) of Tilt Lever and then install the Tilt Tension Spring.
2. Lift the Optical Pick Up a little by finger.
Then install the Height Joint Plate so that the Shaft (E) and (F) fit around (C) and (D).

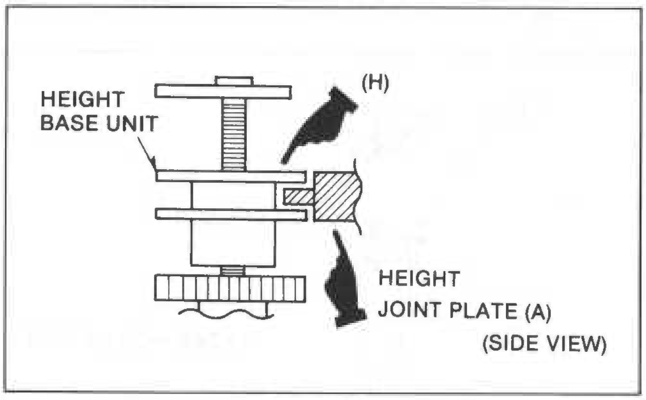


Fig. R21

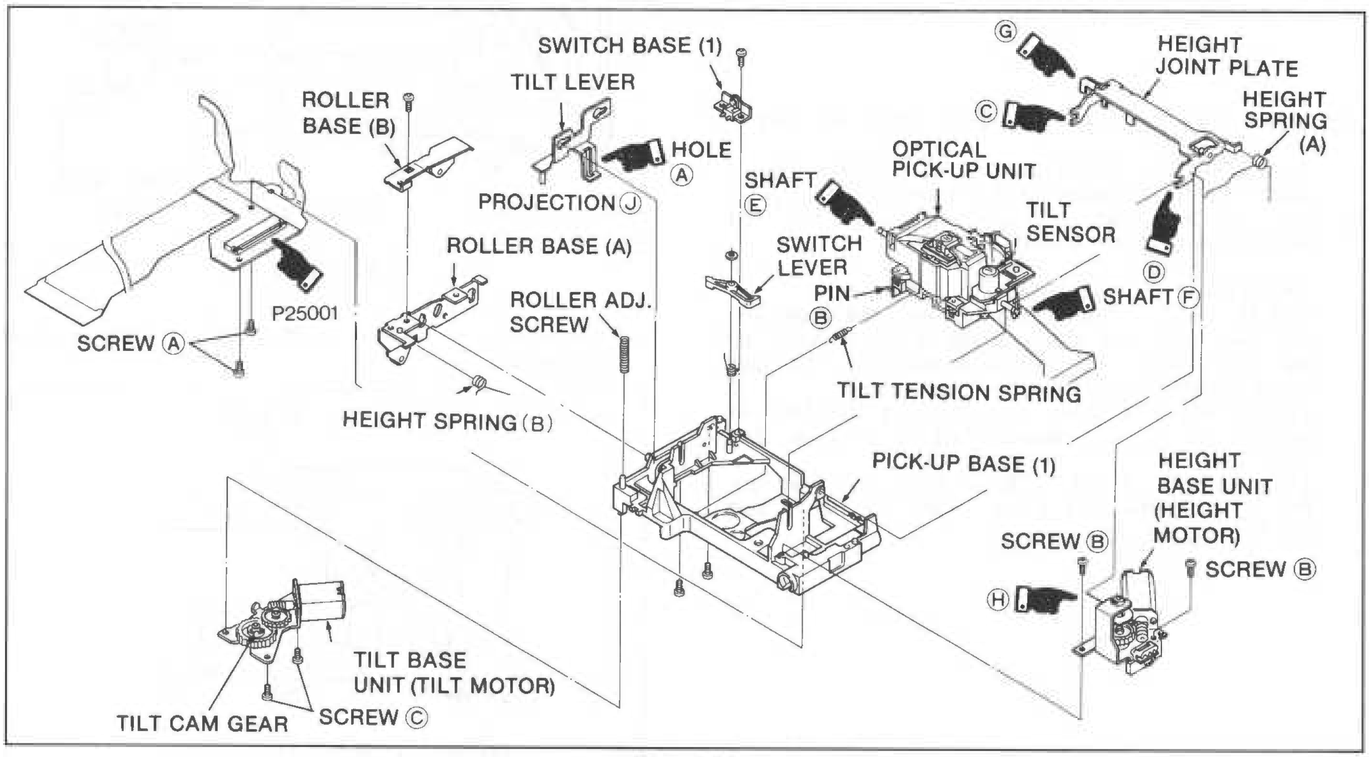


Fig. R20

3. Lift the Optical Pick Up a little and then install the Height Base Unit so that pin (A) of Height Joint Plate fits the (H) position of Height Base Unit as shown in Fig. R21.
Then install the Height Spling (A) and (B).

3-4 REPLACEMENT OF THE TILT SENSOR

1. Unsolder 4 leads from Sensor Base then remove the Tilt Sensor.
2. Place the new Tilt sensor on the sensor Base so that position (A) of Tilt Sensor match the upper right corner of sensor Base as shown in Fig. R22.
After replacement of the Tilt Sensor, readjust the Electrical Adjustment that is item 1-1 to 2-13.

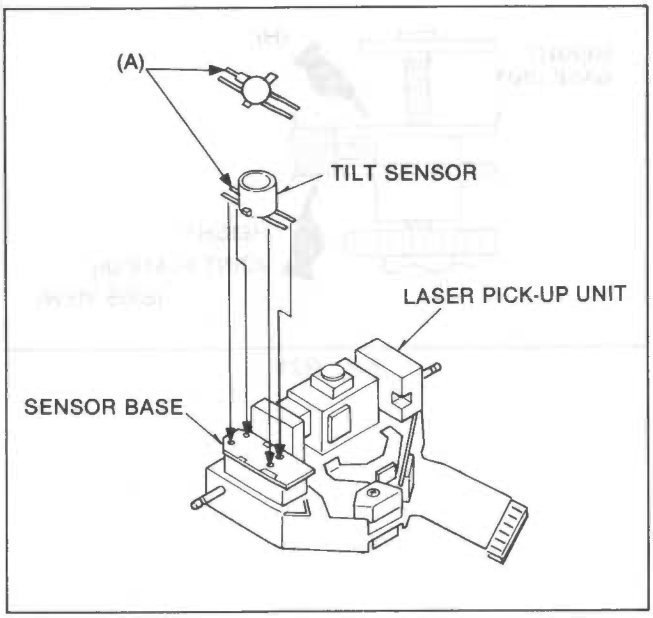


Fig. R22

3-5 REPLACEMENT OF THE TILT MOTOR UNIT

1. To replace the Tilt Motor Unit, perform item 1 and 2 of Replacement of the Optical Pick Up.
2. Remove 2 screws (C) and take out the Tilt Motor Unit as shown in Fig. R20.

<Alignment Procedures of Tilt Cam Gear.>
Install the Tilt Cam Gear so that the Hole (A) on the Tilt Cam Gear aligns with Hole(B) on the Tilt Base. To facilitate aligning the hole use a small Hex wrench or a metal pin.
Install the Tilt Gear and then install the cut washer so as to mount Tilt Cam Gear and Tilt Gear.
Then install the Tilt Base Unit so that the Pin (J) on the Tilt Lever meets the inner slot of Tilt Cam Gear.

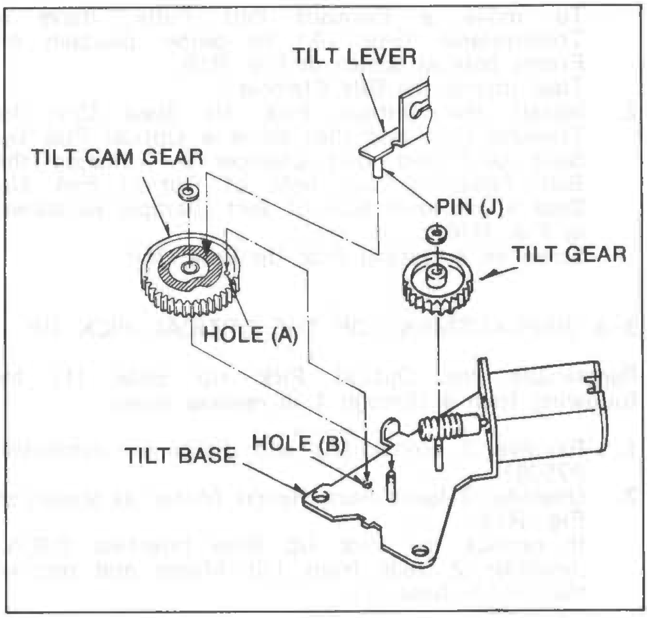


Fig. R23

3-6. REPLACEMENT OF THE TRAVERSE MOTOR

1. To replace the Traverse Motor, perform item 1 to 3 of Replacement of the Optical Pick Up Base Unit.
2. Remve 5 screws and Retaining Ring for Flex.Cable Hold Spring then remove the Guide Base (L).

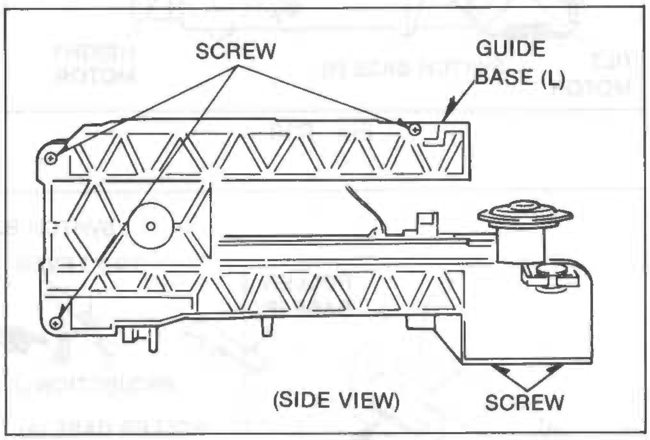


Fig. R24

3. Remove the Forward Belt Pully and then remove 2 screws.

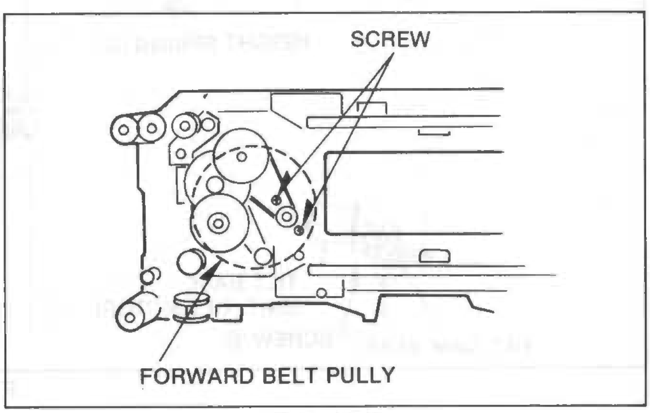


Fig. R25

2-3. ELECTRICAL ADJUSTMENT PROCEDURES

1. TEST & SERVICE EQUIPMENT

To perform the electrical adjustment completely, following equipments are required.

1. VTVM (Vacuum Tube Volt Meter) or DVM (Digital Volt Meter)
   Voltage Range: 0.001–50V
2. Dual–Trace Oscilloscope
   Voltage Range: 0.005–50V/div
   Frequency Range: DC–20MHz
   Probes: 10:1 or 1:1
3. Frequency Counter
   Frequency Range: 0–10MHz
4. Color Monitor TV
5. Plastic Tip Driver
6. Grating Driver (VFK0651)
7. LD Test Disc (VFK0652)
8. CD Test Disc (SZZP1054C)
9. HEX Wrench

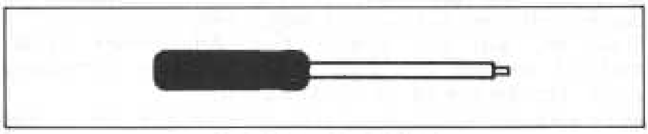


Fig. E1 VFK0651

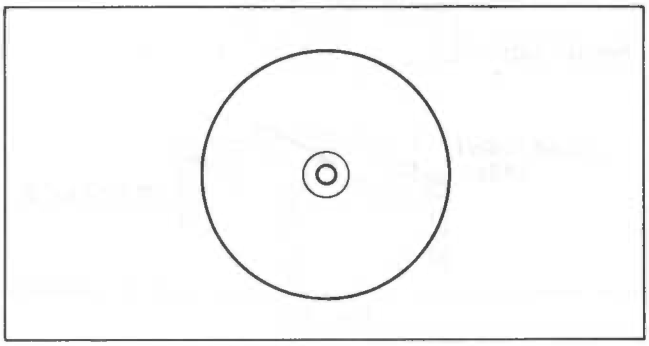


Fig. E2 VFK0652

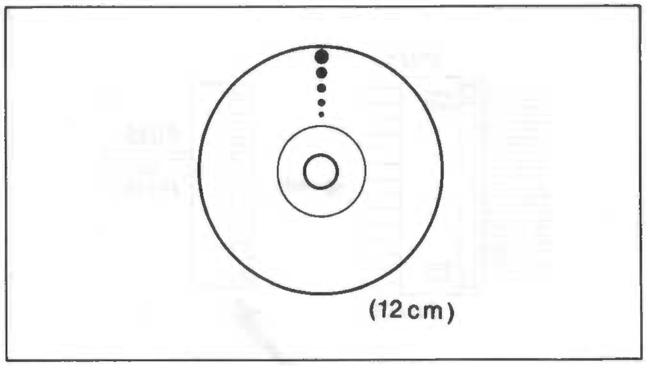


Fig. E3 SZZP1054C

10. Servo Gain Fixture (SZZP1017F or SZZP1094C)

When adjust the Servo Section, Servo Gain Fixture for CD Player is used.

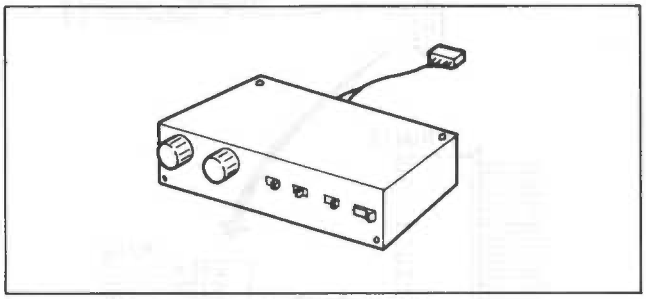


Fig. E5 SZZP1094C

11. Connector for Servo Gain Fixture (VFK0649)

This connector is used to connect the Multi Laser Player, as Servo Gain Fixture is made for CD Player.
So, If use SZZP1017F, attach a connector VFK0649 for Multi Laser Player.

NOTE:
Remove jumper found on connector P22003 make sure this jumper is reinstall after adjustment procedures are completed.

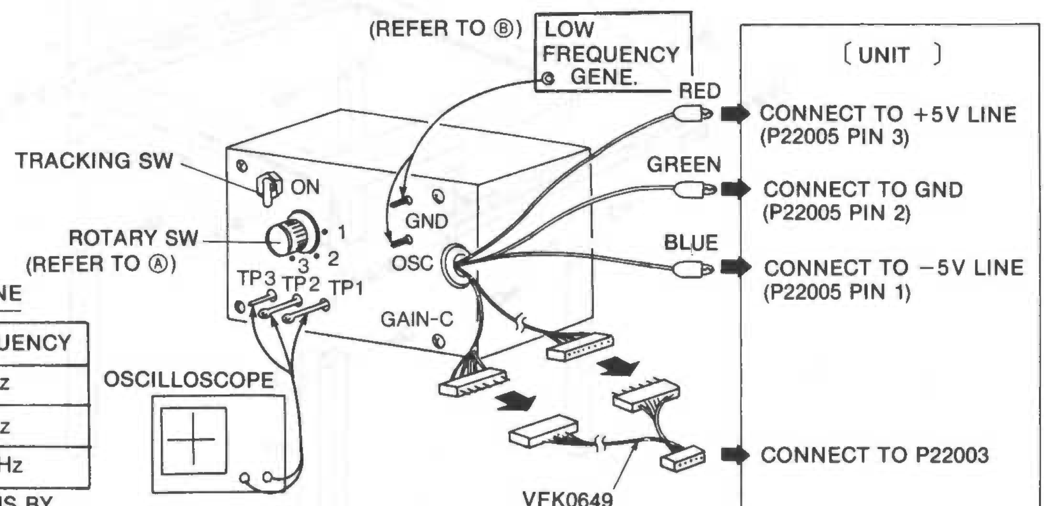
Ⓐ ROTARY SW

SW	ADJ
1	FOCUS SERVO
2	OFF
3	TRACKING SERVO

Ⓑ LOW FREQUENCY GENE

ADJ		FREQUENCY
CD	FOCUS	750Hz
	TRACKING	1.2kHz
LD FOCUS		※2.0kHz

IF ADJUST THE LD FOCUS BY USING SZZP1094C, THE FREQUENCY IS SET TO 1.5KHZ.



CAUTION: DO NOT REMOVE GND LINE (GREEN CLIP) DURING SERVICING SINCE FOCUS SERVO BECAMES ABNORMAL CONDITION.

Fig. E4 CONNECTION OF SZZP1017F

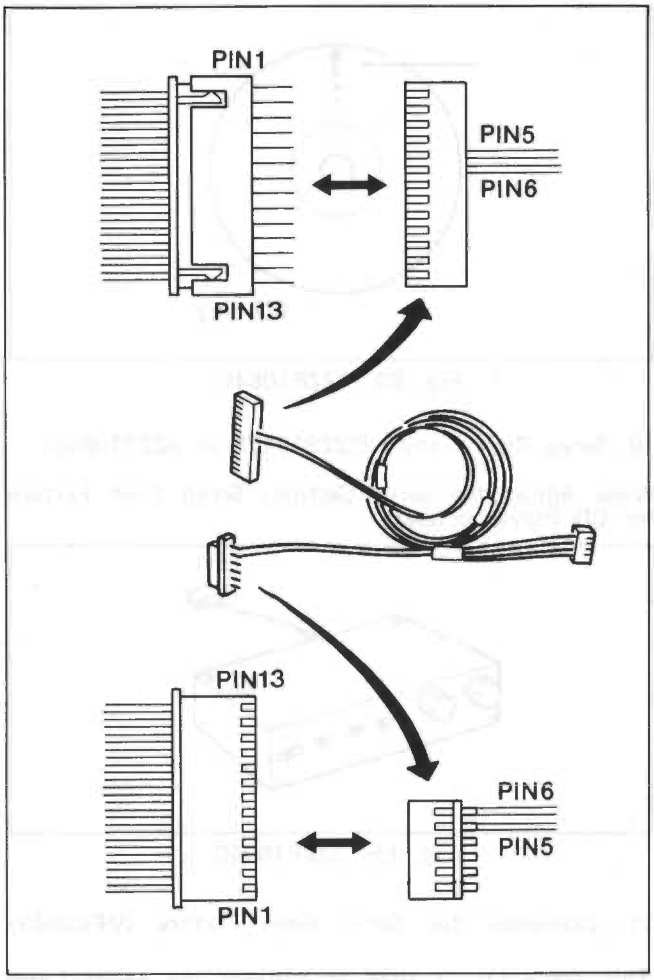


Fig. E6 VFK0649

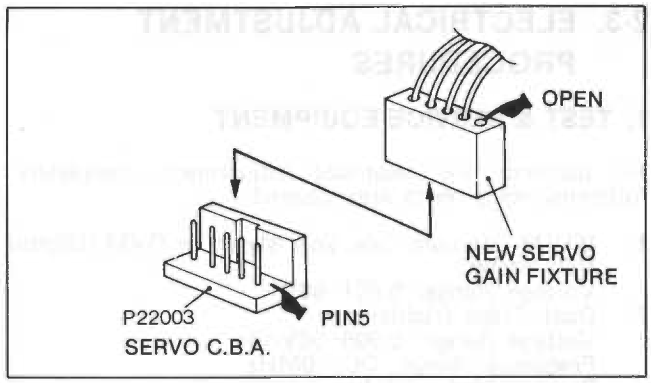


Fig. E7 NEW SERVO GAIN FIXTURE

12. Adjustment Table

When adjust the 1–1 Tilt Sensor Adj and 1–2 Graiting (Side A) Adj, this Adjustment Table is used for keeping unit horizontally and adjusting from bottom side.
If place the unit left or right side down (not horizontal), can not correct adjustment.
Since we will not supply this Adjustment Table, make it yourself by using metal frame or something which has been sold in local market.

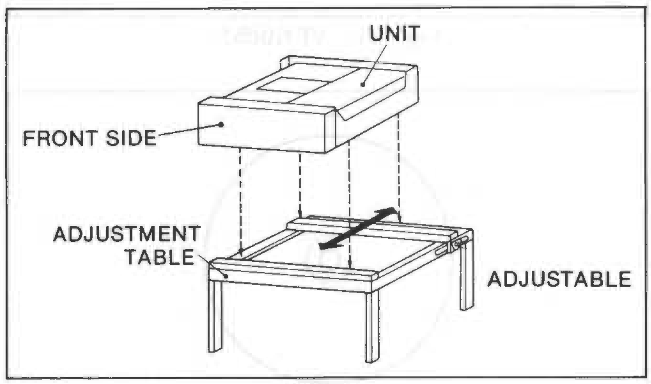


Fig. E8

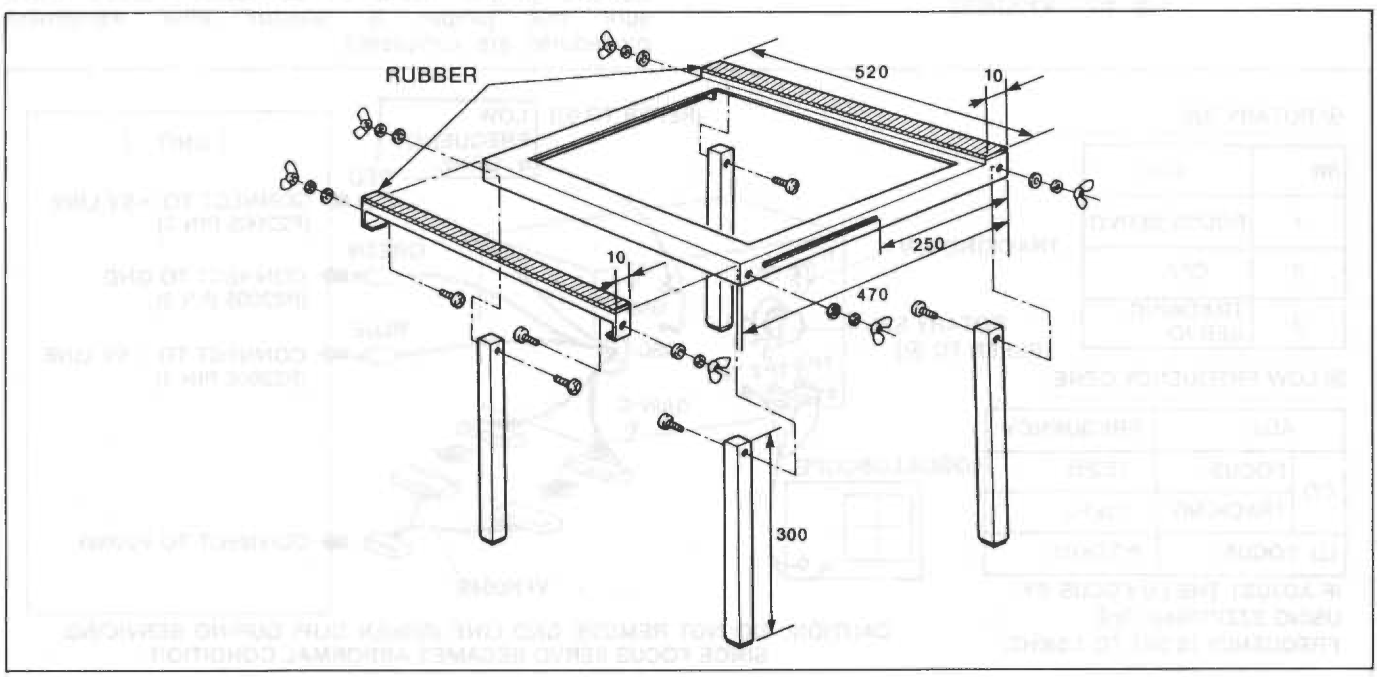


Fig. E9

2. HOW TO READ THE ADJUSTMENT PROCEDURES

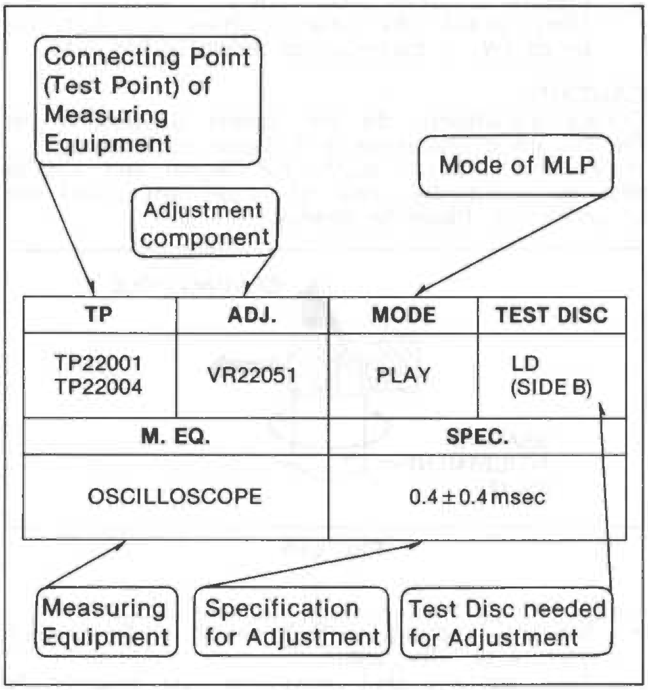


Fig. E10

3. ADJUSTMENT PROCEDURES

These adjustment procedures consist of the following sections.

1. Optical Pick Up Section
2. Servo Section
3. Video Section
4. Digital Audio Section
5. Video Section
6. Location of Test Points and Adjustment Points.

1. OPTICAL PICK UP SECTION

1-1. TILT SENSOR ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
	TILT SENSOR ADJ. SCREW	PLAY (SIDE A)	LD SIDE 2 (FRAME 9005)

M. EQ.	SPEC.
OSCILLOSCOPE	BEAT is MINIMIZED

NOTE:
As the spare parts for Optical Pick Up (VEK4894) has been already adjusted, it is not necessary to do it again.

1. Set the LD Test Disc to Tray.
   Then play back the side A .
2. Place the unit in still mode with white pattern (FRAME 9005) of the LD Test Disc.
3. Adjust Tilt Sensor Adjustment Screw so that the beat on TV screen is minimized.

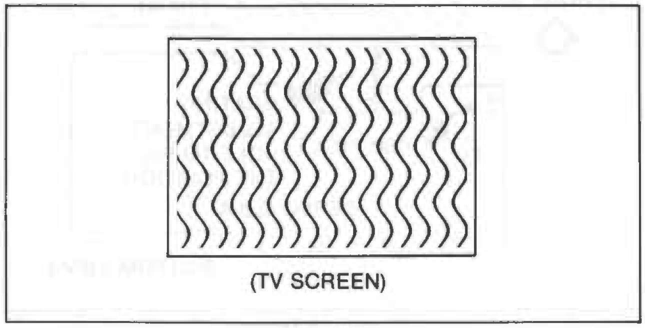


Fig. E11

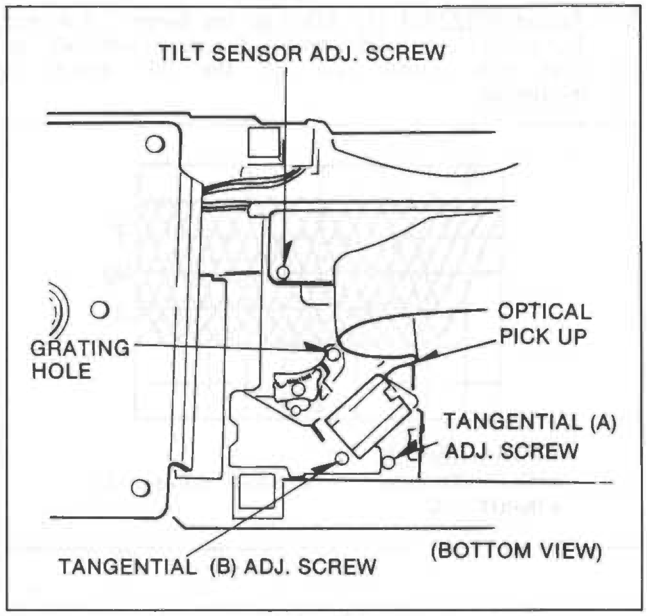


Fig. E12

1-2. GRATING (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22003 (TE)	VR22301 TANGENTIAL (A) ADJ. SCREW GRAITING HOLE	PLAY	CD (TRACK 11)

M. EQ.	SPEC.
OSCILLOSCOPE	TE SIGNAL is MAXIMIZE

NOTE:
If optical pick up unit is replaced, the following adjustment is necessary.
The original factory optical pick up unit does not need any adjustment, the adjustment hole is sealed with glue.

1. Connect the oscilloscope to TP22001 (CH1) and TP22003 (CH2) on the Servo C.B.A..
2. Play back the Track 11 of CD Test Disc.
3. Confirm that Tangential (A) Adjustment Screw is seen through Adjustment hole on the Servo C.B.A..

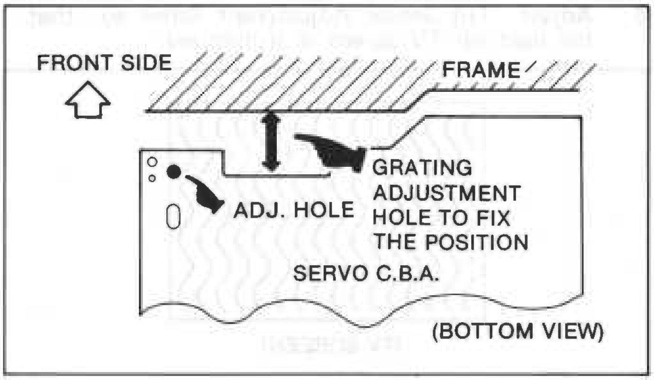


Fig. E13

3. Adjust VR22301 (N–ADJ) on the Servo C.B.A. and Tangential (A) Adjustment Screw alternalely so that the width (A) of the RF signal is maximize.

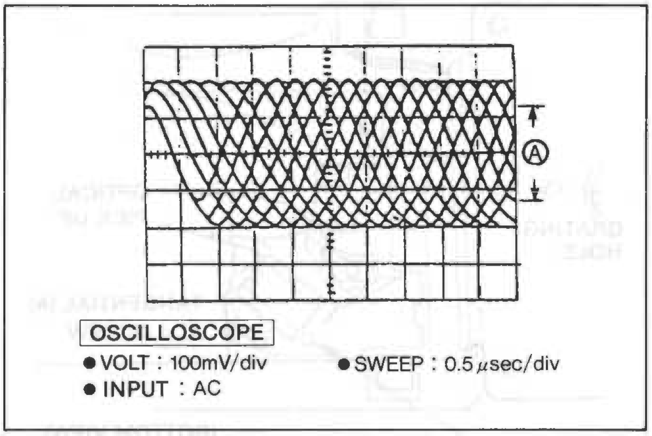


Fig. E14

4. Disconnect the connector P22003 on the Servo C.B.A. and then connect the Servo Gain Fixture as shown in Fig. E4.
5. Set the switches on the front panel of Servo Gain Fixture to the following position.

Tracking SW : ON
Rotary SW : 2

6. Play back the CD Test Disc. At this time, Grating Hole can be seen through space which is between Servo C.B.A. and Frame as shown in Fig E13.
7. Confirm that Waveform (A) becomes as shown in Fig. E15.

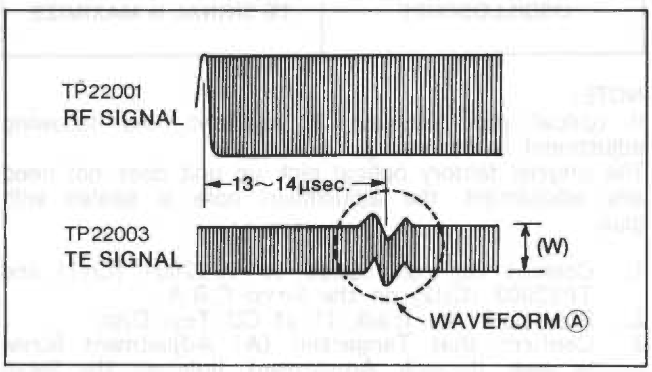


Fig. E15

8. Set the Tracking ON/OFF switch of Servo Gain Fixture to "OFF" from "ON".
Then adjust the Grating Hole so that the width (W) is maximize as shown in Fig. E15.

CAUTION:
During adjustment, do not rotate Grating Adjust Pin too much (maximam +–2 degree to 3 degree).
If you turn it too much, RF Signal can not be detected, eventually, rest of adjustment could not be performed. Please be careful.

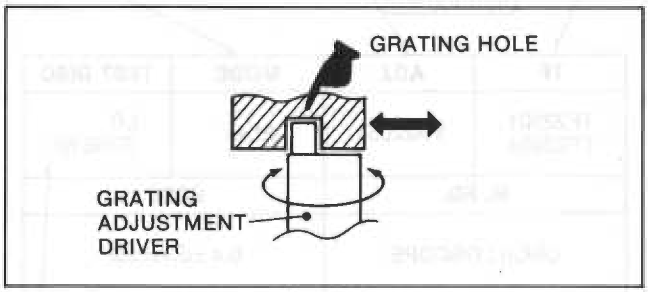


Fig. E16

9. Set the Tracking ON/OFF switch of Servo Gain Fixture to "ON" again.
Then confirm that waveform (A) becomes as shown in Fig. E15.

1-3. GRATING (SIDE B) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22003 (TE)	VR22302 TANGENTIAL (B) ADJ. SCREW Shaft Bearing (B) ADJ. SCREW	PLAY (SIDE B)	LD
M. EQ.		SPEC.	
OSCILLOSCOPE		RF SIGNAL is MAXIMIZE	

1. Connect the oscilloscope to TP22001 (CH1) and TP22003 (CH2) on the Servo C.B.A..
2. Play back the side B of LD Test Disc . At this time, Tangential (B) Adjustment Screw can be seen through the Traverse Unit.

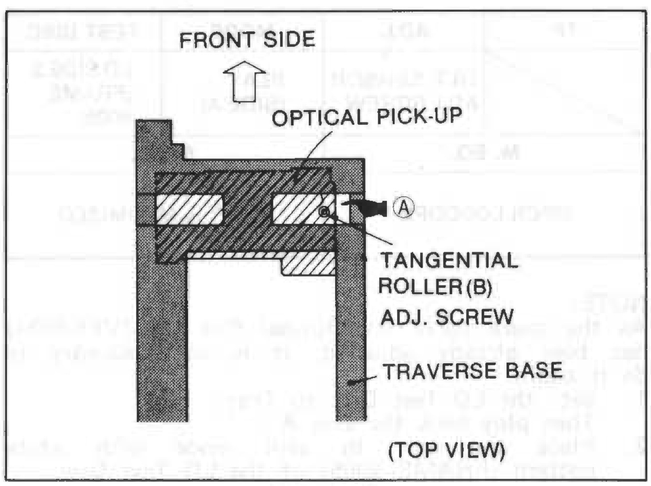


Fig. E17

3. Adjust VR22302 (R−ADJ) on the Servo C.B.A. and Tangential (B) Adjustment Screw alternately so that the width (A) of RF Signal is maximize.
4. Set the Tracking ON/OFF switch of Servo Gain Fixture to "OFF".
   Then adjust the Shaft Bearing (B) Adjustment Screw so that the TE signal of TP22003 becomes maximum as shown in Fig. E15.

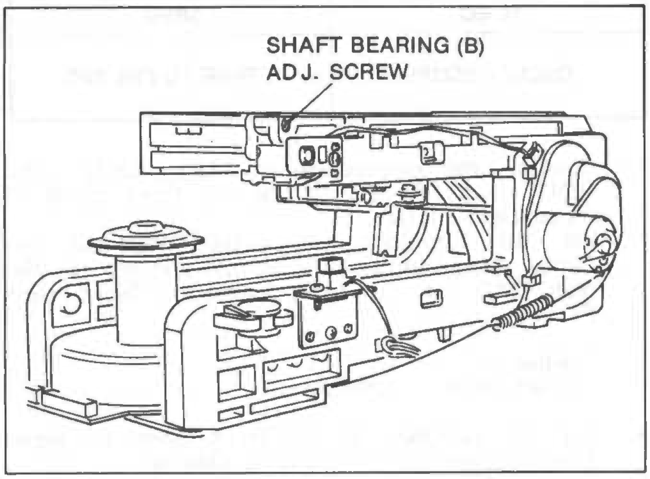


Fig. E18

1-4. AZIMUTH (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
	VR22301	STILL (SIDE A)	LD SIDE 2 (FRAME 1503)
M. EQ.		**SPEC.**	
		BEAT is MINMIZED	

1. Set the LD Test Disc to Tray so that the Side 2 (CAV) face downward.
   Then play back the Side A.
2. Place the unit in Still mode with white pattern. (FRAME 1503).
3. Adjust VR22301 (N−ADJ) on the Servo C.B.A. so that the beat on TV screen is minimized as shown in Fig. E11.

1-5. AZIMUTH (SIDE B) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
	VR22302	STILL (SIDE B)	LD SIDE 2 (FRAME 9005)
M. EQ.		**SPEC.**	
		BEAT is MINIMIZED	

1. Set the LD Test Disc to Tray so that the Side 2 (CAV) face downward.
   Then play back the Side B.
2. Place the unit in Still mode with white pattern. (FRAME 9005).
3. Adjust VR22302 (R−ADJ) on the Servo C.B.A. so that the beat on TV screen is minimized as shown in Fig. E11.

2. SERVO SECTION

2-1. CD FOCUS BALANCE ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001	VR22055	PLAY	CD
M. EQ.		**SPEC.**	
OSCILLOSCOPE		REFER TO FIG. E19	

1. Connect 5 pins connector and 3 clips of Servo Gain Fixture to Unit as shown in Fig. E4.
2. Set the frequency and output level of the Signal Generator as follows and connect to OSC and GND on the front panel of Servo Gain Fixture.

   Frequency : 750Hz
   Output Level : 560mVp−p

3. Set the switches on the front panel of Servo Gain Fixture to the following position.

   Tracking SW : ON
   Rotary SW : 2

4. Connect the oscilloscope to OSC (CH1) of Servo Gain Fixture and TP22001 (CH2) on the Servo C.B.A.
5. Play back the CD Test Disc.
6. Change the Rotary SW of Servo Gain Fixture to "1" from "2".
7. Adjust VR22055 (F−CD BAL) on the Servo C.B.A. so that the amplitude (A) of the RF signal is at a minimum or the amplitude (B) and (C) of RF signal is at the same level as follows.

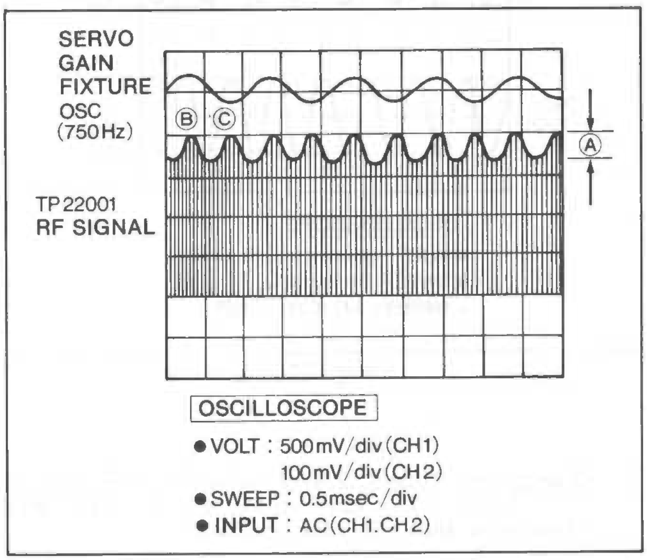


Fig. E19

8. Change the Rotary SW of Servo Gain Fixture to "2" from "1" and then adjust the next adjustment that is Focus Gain.

2-2. FOCUS GAIN ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP 1 and 2 OF SERVO GAIN FIXTURE	VR22056	PLAY	CD
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E20	

1. Connect the oscilloscope to TP1 (CH1), TP2 (CH2) and TP3 (GND) on the front panel of Servo Gain Fixture.
2. Set the frequency and output level of the Signal Generator as follows and connect to OSC and GND on the front panel of Servo Gain Fixture.

   Frequency : 750Hz
   Output Level : 100mVp-p

3. Set the switches on the front panel of Servo Gain Fixture to the following position.

   Tracking SW : ON
   Rotary SW : 2

4. Play back the CD Test disc.
5. Change the Rotary SW of Servo Gain Fixture to "1" from "2".
6. Adjust VR22056 (F-Gain) on the Servo C.B.A. so that the waveform (A) and (B) is at the same level as follows.

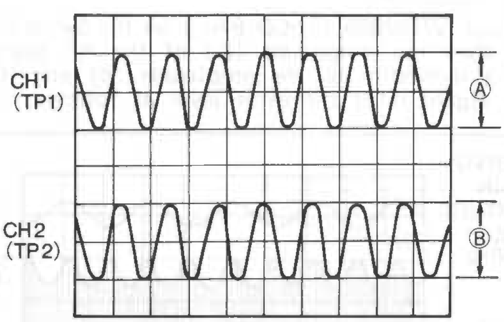


Fig. E20

7. Change the Rotary SW of Servo Gain Fixture to "2" from "1" and then adjust the next adjustment that is Tracking Gain.

2-3. TRACKING GAIN ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP 1 and 2 OF SERVO GAIN FIXTURE	VR22057	PLAY	CD
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E20	

1. Connect the oscilloscope to TP1 (CH1), TP2 (CH2) and TP3 (GND) on the front panel of Servo Gain Fixture.
2. Set the frequency and output level of the Signal Generator as follows and connect to OSC and GND on the front panel of Servo Gain Fixture.

   Frequency : 1.2kHz
   Output Level : 100mVp-p

3. Set the switches on the front panel of Servo Gain Fixture to the following position.

   Tracking SW : ON
   Rotary SW : 2

4. Play back the CD Test Disc.
5. Change the Rotary SW of Servo Gain Flxture to "3" from "2".
6. Adjust VR22057 (T. Gain) on Servo C.B.A. so that the waveform (A) and (B) is at the same level as shown in Fig. E20.
7. Cange the Rotary SW of Servo Gain Fixture to "2" from "3".

2-4. FOCUS OFFSET (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22004 (FE)	VR22052	PLAY	CD (TRACK 13)
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E21	

1. Connect the osilloscope to TP22001 (CH1) and TP22004 (CH2) on the Srevo C.B.A..
2. Play back the Track 13 (BS 0.7mm) of CD Test Disc.
3. Adjust VR22052 (F-N OS) on the Servo C.B.A. so that the RF envelope (CH1) becomes as flat as possible and the waveform (A) and (B) is at the same level or waveform (W) is minimized.

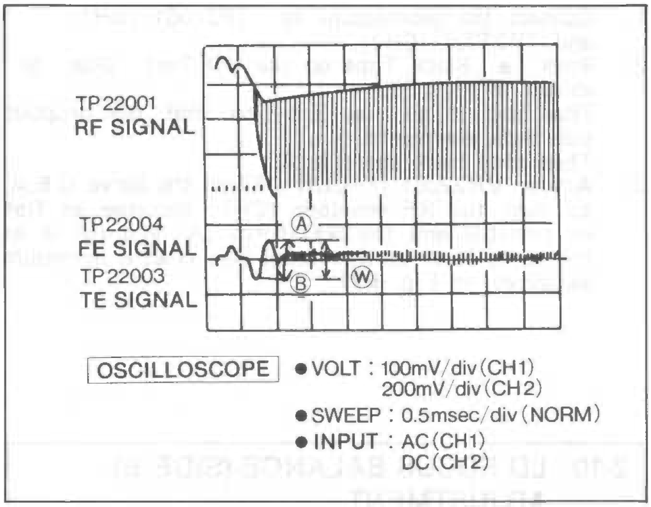


Fig. E21

2-5. CD TRACKING OFFSET ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22003 (TE)	VR22062	PLAY	CD (TRACK 13)
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E21	

1. Connect the oscilloscope to TP22001 (CH1), and TP22003 (CH2) .
2. Play back the Track 13 (BS 0.7mm) of CD Test Disc.
3. Adjust VR22062 (T–CD OS) on the Servo C.B.A. so that the RF envelope (CH1) becomes as flat as possible and the waveform (A) and (B) is at the same level or waveform (W) is minimized as shown in Fig. E21.

2-6. TRACKING BALANCE (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22003 (TE)	VR22059	PLAY	CD (TRACK 7)
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E22	

1. Connect the oscilloscope to TP22001 (CH1) and TP22003 (CH2).
2. Play back the Track 7 (BS 0.8mm) of CD Test Disc
3. Adjust VR22059 (T–N BAL) on the Servo C.B.A so that the RF envelope (CH1) becomes as flat as possible as follows.

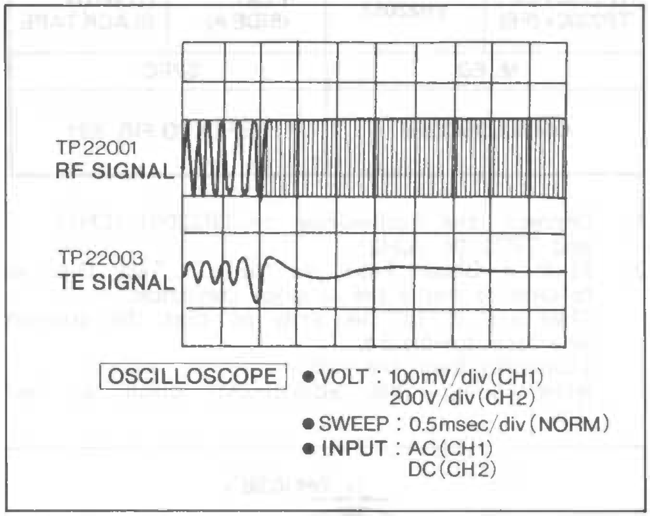


Fig. E22

2-7. LD FOCUS BALANCE (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF)	VR22054	PLAY (SIDE A)	LD
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E19	

1. Set the frequency and output level of the Signal Generator as follows and connect to OSC and GND on the front panel of Servo Gain Fixture.

   Frequency : 2.0kHz
   Output Level : 560mVp–p

2. Set the switches on the front panel of Servo Gain Fixture to the following position.

   Tracking SW : ON
   Rotary SW : 2

3. Connect the oscilloscope to OSC (CH1) of Servo Gain Fixture and TP22001 (CH2).
4. Play back the side A of the LD Test Disc.
5. Change the Rotary SW of Servo Gain Fixture to "1" from "2".
6. Adjust VR22054 (F–N BAL) on the Servo C.B.A. so that the amplitude (A) of RF signal is at a minimum or the amplitude (B) and (C) of RF signal is at the same level as shown in Fig. E19.
7. Change the Rotary SW of Servo Gain Fixture to "2" from "1".

2-8. LD FOCUS OFFSET (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22004 (FE)	VR22063	PLAY (SIDE A)	LD WITH BLACK TAPE
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E21	

1. Connect the oscilloscope to TP22001 (CH1) and TP22004 (CH2).
2. Stick a Black Tape on the LD Test Disc as follows to make the dropout condition.
   Then set it to the Tray so that the dropout side face downward.
   Then play back the side A.
   After doing this adjustment, clean a Test Disc.

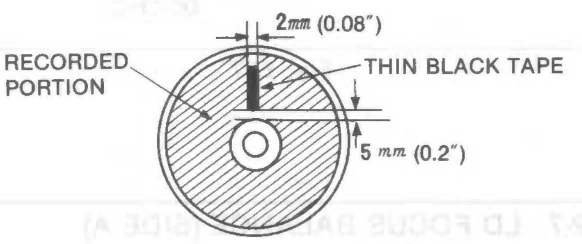


Fig. E23

3. Adjust VR22063 (F−V OS) on the Servo C.B.A. so that the RF envelope (CH1) becomes as flat as possible and the waveform (A) and (B) is at the same level or waveform (W) is at a minimum as shown in Fig. E21.

NOTE:
When VR22063 for LD Focus Offset is changed (repair), must be readjust the following items.

Item 2-4 Focus Offset (Side (A)) Adjustment
Item 2-8 LD Focus Offset (Side (A)) Adjustment
Item 2-11 LD Focus Offset (Side (B)) Adjustment

2-9. LD TRACKING OFFSET (SIDE A) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22003 (TE)	VR22061	PLAY (SIDE A)	LD WITH BLACK TAPE
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E21	

1. Connect the oscilloscope to TP22001 (CH1) and TP22003 (CH2).
2. Stick a Black Tape on the LD Test Disc as shown in Fig. E23.
   Then set it to the Tray so that the dropout side face downward.
   Then play back the side A.
3. Adjust VR22061 (T−LDN OS) on the Servo C.B.A. so that the RF envelope (CH1) becomes as flat as possible and the waveform (A) and (B) is at the same level or waveform (W) is at a minimum as shown in Fig. E21.

2-10. LD FOCUS BALANCE (SIDE B) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF)	VR22053	PLAY (SIDE B)	LD
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E19	

1. Set the frequency and output level of the Signal Generator as follows and connect to OSC and GND on the front panel of Servo Gain Fixture.

   Frequency : 2.0kHz
   Ouput Level : 560mVp-p

2. Set the switches on the front panel of Servo Gain Fixture to the following position.

   Tracking SW : ON
   Rotary SW : 2

3. Connect the oscilloscope to OSC (CH1) of Servo Gain Fixture and TP22001 (CH2) on the Servo C.B.A..
4. Play back the side B of LD Test Disc.
5. Change the Rotary SW of Servo Gain Fixture to "1" from "2".
6. Adjust VR22053 (F−R BAL) on the Servo C.B.A. so that the amplitude (A) of RF signal is at a minimum or amplitude (B) and (C) of RF signal is at the same level as shown in Fig. E19.
7. Change the Rotary SW of Servo Gain Fixture to "2" from "1".

2-11. LD FOCUS OFFSET (SIDE B) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22004 (FE)	VR22051	PLAY (SIDE B)	LD WITH BLACK TAPE
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E21	

1. Connect the oscilloscope to TP22001 (CH1) and TP22004 (CH2).
2. Stick a Black Tape on the LD Test Disc as shown in Fig. E23.
   Then set it to the Tray so that the dropout side face upward.
   Then play back the side B.
3. Adjust VR22051 (F−R OS) on the Servo C.B.A. so that the RF envelope (CH1) becomes as flat as possible and the waveform (A) and (B) is at the same level or waveform (W) is minimized as shown in Fig. E21.

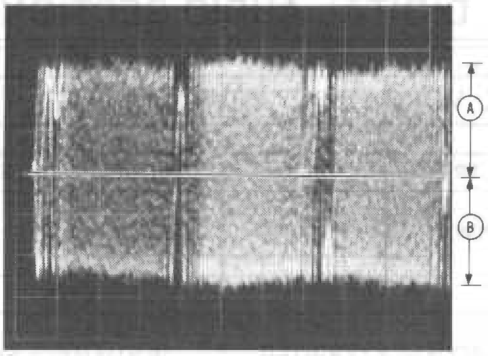
2-12. LD TRACKING BALANCE (SIDE B) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22003 (TE)	VR22058	PLAY (SIDE B)	LD WITH BLACK TAPE
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E24	

1. Set the switches on the front panel of Servo Gain Fixture to the following position.

   Tracking SW : ON
   Rotary SW : 2

2. Connect the oscilloscope to TP22003.
3. Stick a Black Tape on the LD Test Disc as shown in Fig. E23.
   Then set it to the Tray so that the dropout side face upward.
   Then play back the side B.
4. Change the Tracking ON/OFF SW of Servo Gain Fixture to "OFF" from "ON".
5. Adjust VR22058 (T−R BAL) on the Servo C.B.A. so that the waveform has equal Upper and Lower levels as compered to the center GND.



OSCILLOSCOPE
- VOLT : 200mV/diV
- SWEEP : 5msec/diV
- INPUT : DC

Fig. E24

2-13. LD TRACKING OFFSET (SIDE B) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
TP22001 (RF) TP22003 (TE)	VR22060	PLAY (SIDE B)	LD WITH BLACK TAPE
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E21	

1. Connect the oscilloscope to TP22001 (CH1) and TP22003 (CH2).
2. Stick a Black Tape on the LD Test Disc as shown in Fig. E23.
   Then set it to the Tray so that the dropout side face upward.
   Then play back the side B.
3. Adjust VR22060 (T−LDR OS) on the Servo C.B.A. so that the RF envelope (CH1) becomes as flat as possible and the waveform (A) and (B) is at the same level or waveform (W) is at a minimum as shown in Fig. E21.

3. DIGITAL AUDIO SECTION

3-1. VCXO (1)

TP	ADJ.	MODE	TEST DISC
TP24007	VR24001	STOP	CD
M. EQ.		SPEC.	
FREQUENCY COUNTER		16.9344 MHz ± 300 Hz	

3-2. VCXO (2)

TP	ADJ.	MODE	TEST DISC
TP24008	VR24002	PLAY	LD
M. EQ.		SPEC.	
OSCILLOSCOPE		W = LESS THAN 4μsec.	

1. Connect the oscilloscope to TP24008 on the Main C.B.A..
2. Adjust VR24002 on the Main C.B.A. so that the width (W) of the EC pulse is less than 4 usec.

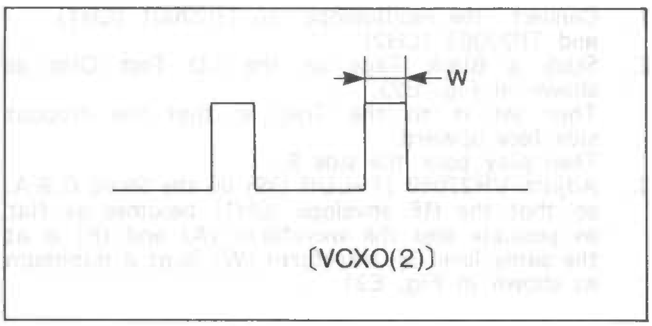


Fig. E25

4. VIDEO SECTION

4-1. VIDEO PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
P23203 PIN 8	VR23201	PLAY	LD (CHAPTER 19)
M. EQ.		SPEC.	
OSCILLOSCOPE		A = 0.8 ± 0.05 Vp-p	

1. Adjust VR23201 (Video P.B Level) so that the level of the Luminance signal becomes 0.8+−0.05Vp−p

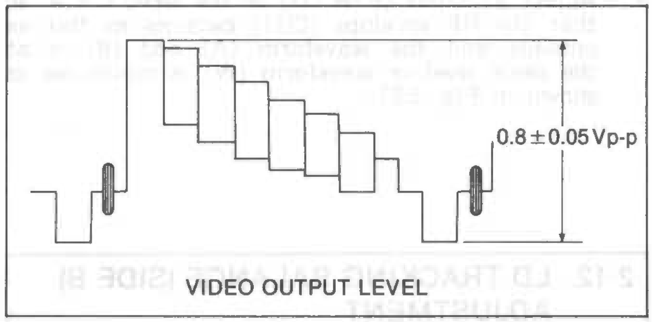


Fig. E26

4-2. CHARACTER (BLACK) LEVEL ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
P23705 PIN 4 P23707 PIN 4	VR23701	PLAY (OSD CONDITION)	LD (MONO-CHROME)
M. EQ.		SPEC.	
OSCILLOSCOPE		REFER TO FIG. E27	

1. Play back the LD Test Disc with monochrome. (For example Chapter 22)
2. Push Display key on the remote controller to indicate the character on TV screen.
3. Adjust VR23701 so that the black level is at the same level with pedestal level.

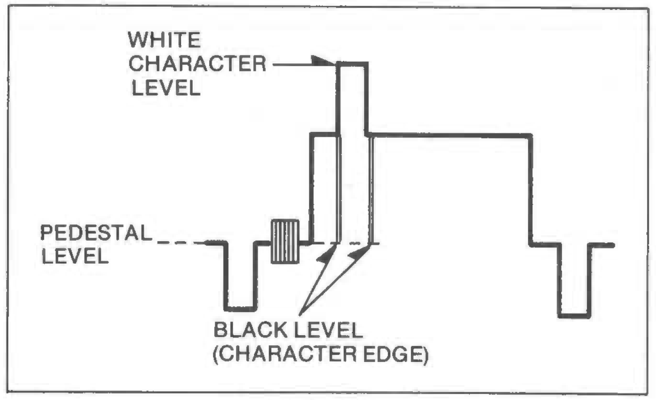


Fig. E27

4-3. PLAYBACK Y LEVEL (S-VHS TERMINAL) ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
P23706 PIN 1	VR23702	PLAY	LD (CHAPTER 19)
M. EQ.		SPEC.	
OSCILLOSCOPE		A=1.0±0.05Vp-p	

1. Connect a S–VHS cable between S–Video output terminal and TV.
2. Connect the oscilloscope to pin 1 of P23706.
3. Adjust VR23702 (P.B LEVEL) so that the level of the Luminance signal becomes 1.0+–0.05Vp–p.

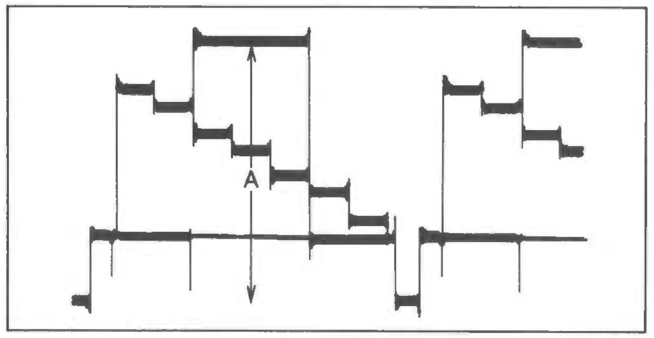


Fig. E28

4-4. VIDEO OUTPUT LEVEL ADJUSTMENT

TP	ADJ.	MODE	TEST DISC
VIDEO OUTPUT PIN JACK	VR23703	PLAY	LD (CHAPTER 19)
M. EQ.		SPEC.	
OSCILLOSCOPE		A=1±0.05Vp-p	

1. Connect the oscilloscope to Video output.
2. Adjustment VR23703 so that the level of Video signal becomes 1+–0.05Vp–p.

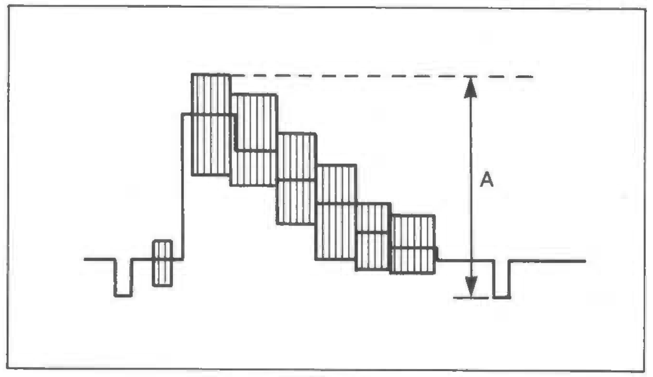


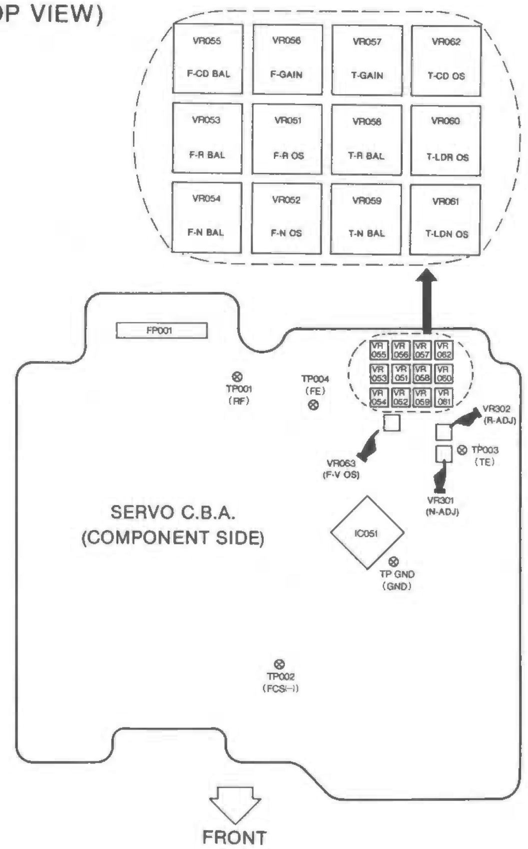
Fig. E29

4-5. CHROMA TRAP ADJUSTMENT

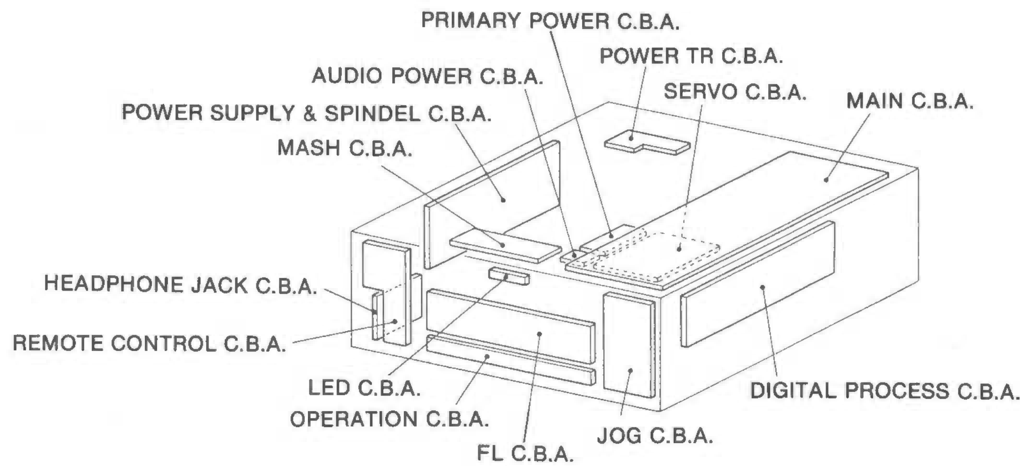
TP	ADJ.	MODE	TEST DISC
TP23704	CT23702	PLAY	LD (CHAPTER 20)
M. EQ.		SPEC.	
OSCILLOSCOPE		CHROMINANCE LEVEL= LESS THAN 50mVp-p	

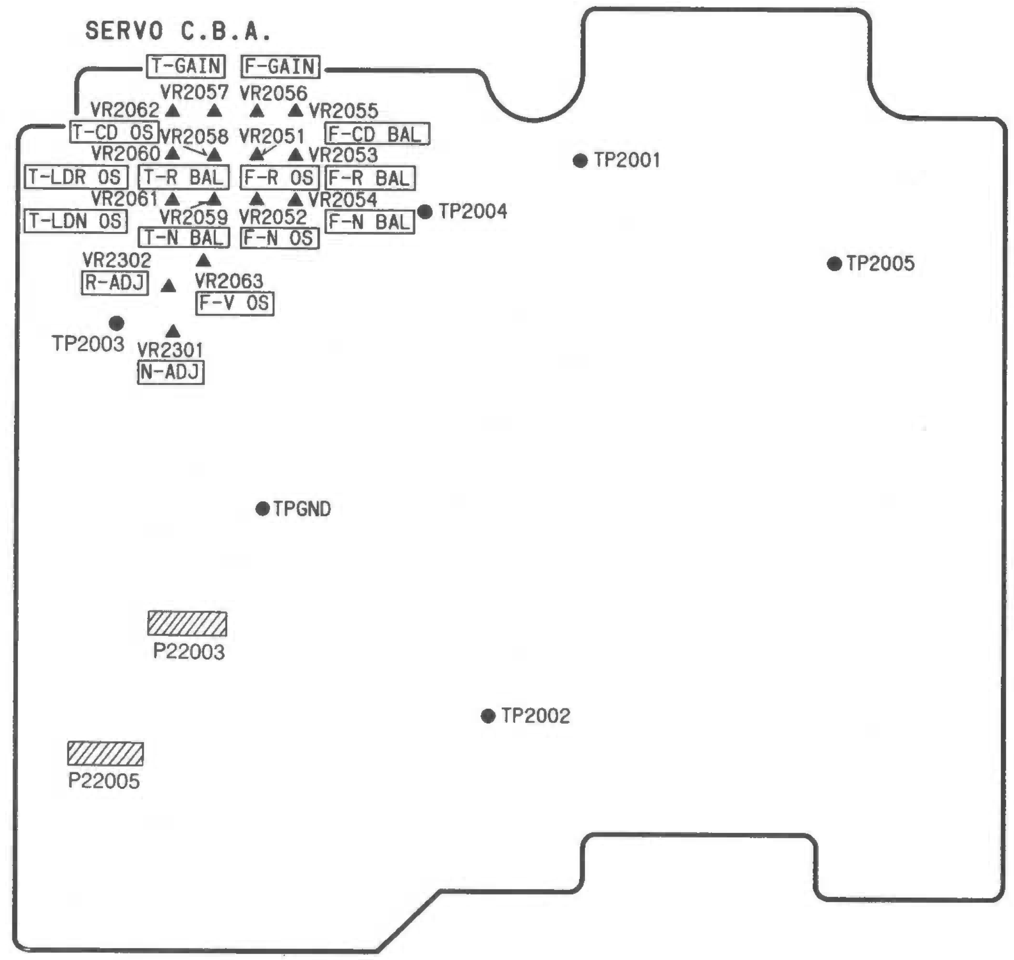
1. Connect the oscilloscope to TP23704.
2. Adjust CT23702 so that the chrominance level becomes less than 50mVp–p.

(TOP VIEW)



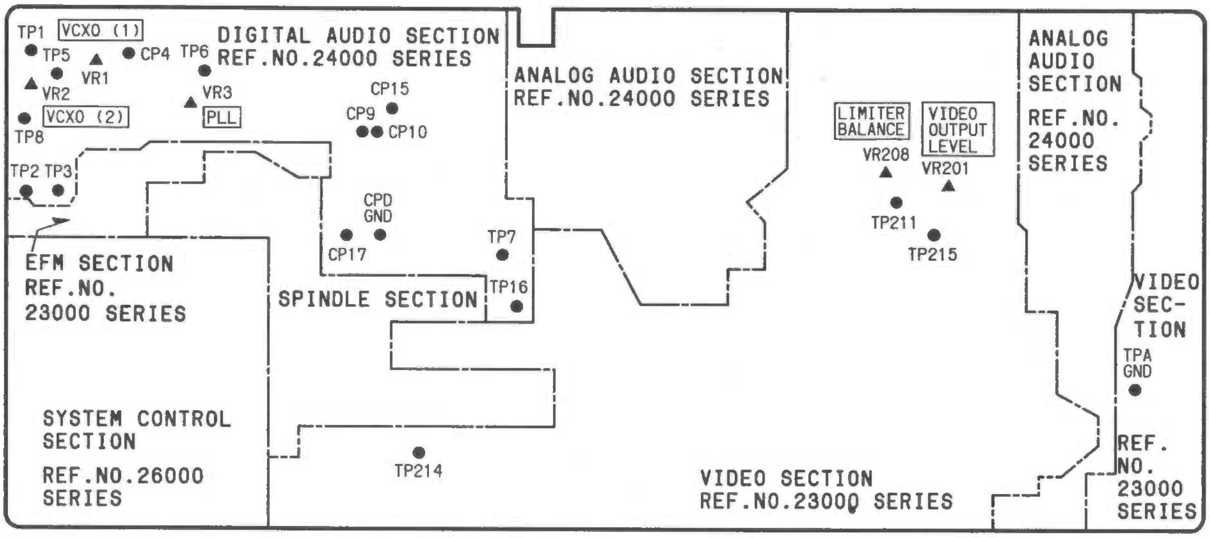
5. LOCATION OF TEST POINTS & CONTROLS



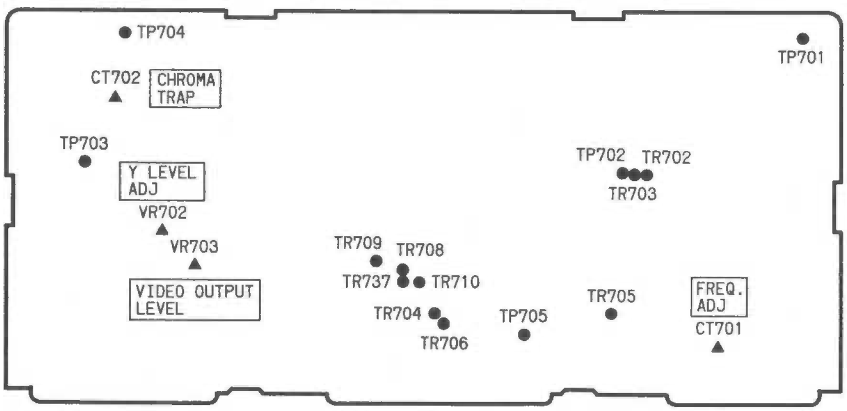


Memo:

MAIN C.B.A.

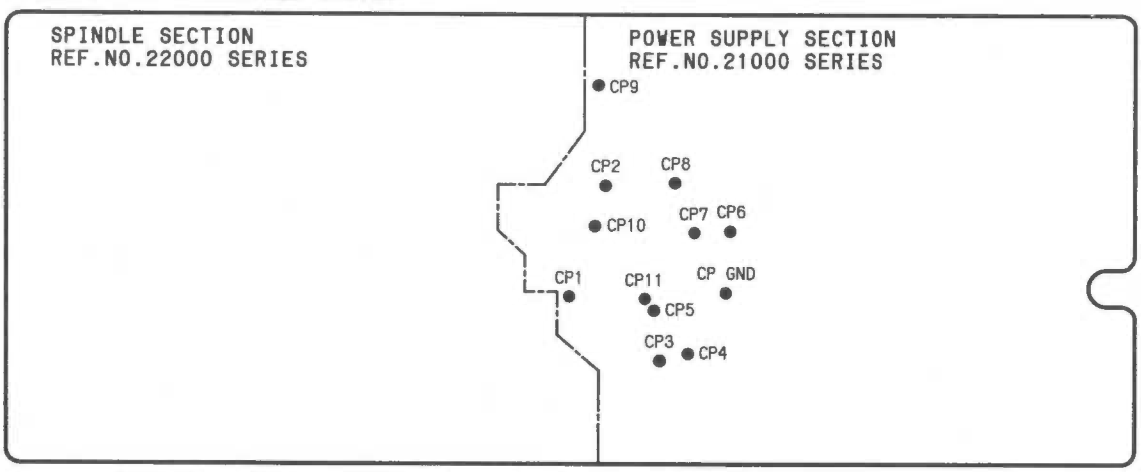


DIGITAL PROCESS C.B.A.



REF.NO.23000 SERIES (COMPONENT SIDE)

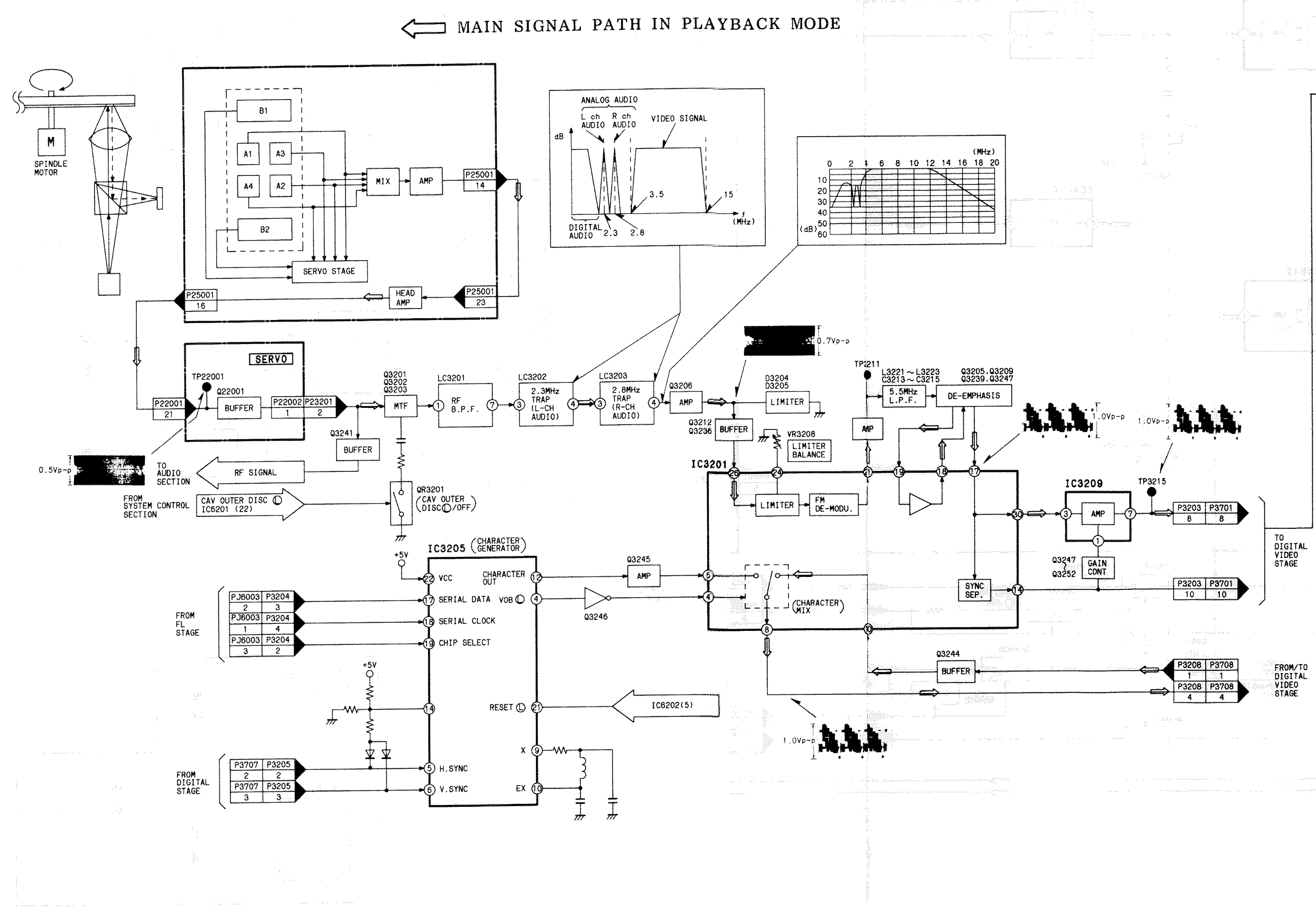
POWER SUPPLY & SPINDLE C.B.A.



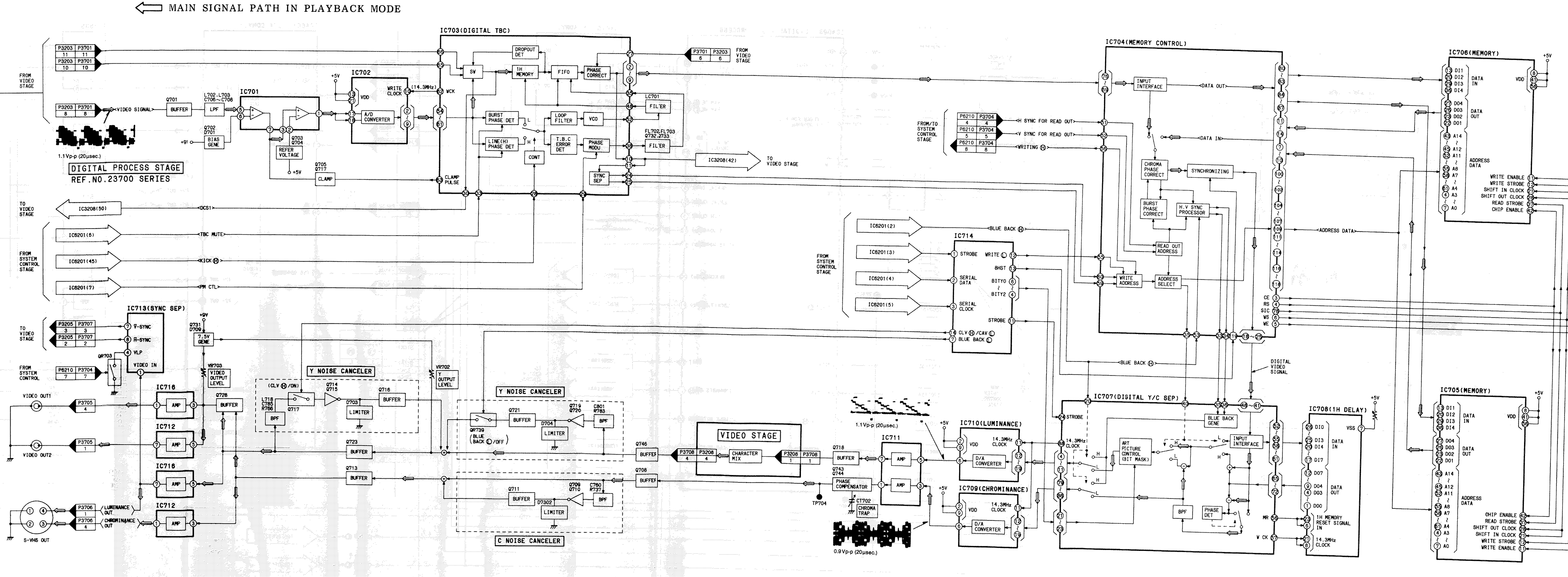
Memo:

Section 3
BLOCK DIAGRAMS & SCHEMATIC DIAGRAMS

3-1. VIDEO BLOCK DIAGRAM


3-2. DIGITAL VIDEO BLOCK DIAGRAM




Next Page:
AUDIO & MASH BLOCK

3-3. AUDIO & MASH BLOCK DIAGRAM

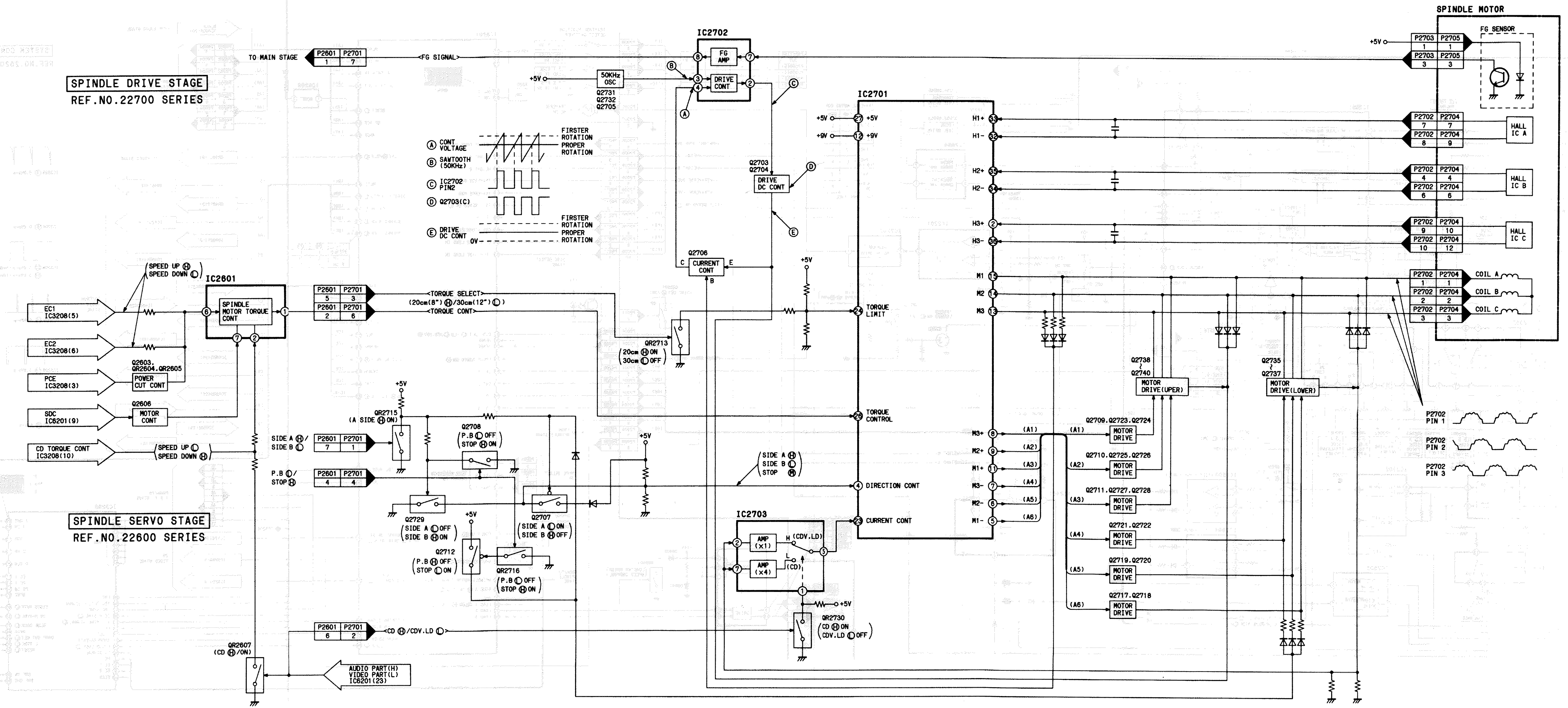


Back Page:
VIDEO, DIGITAL VIDEO BLOCK

3-4. SERVO & SYSTEM CONTROL BLOCK DIAGRAM



3-5. SPINDLE SERVO BLOCK DIAGRAM



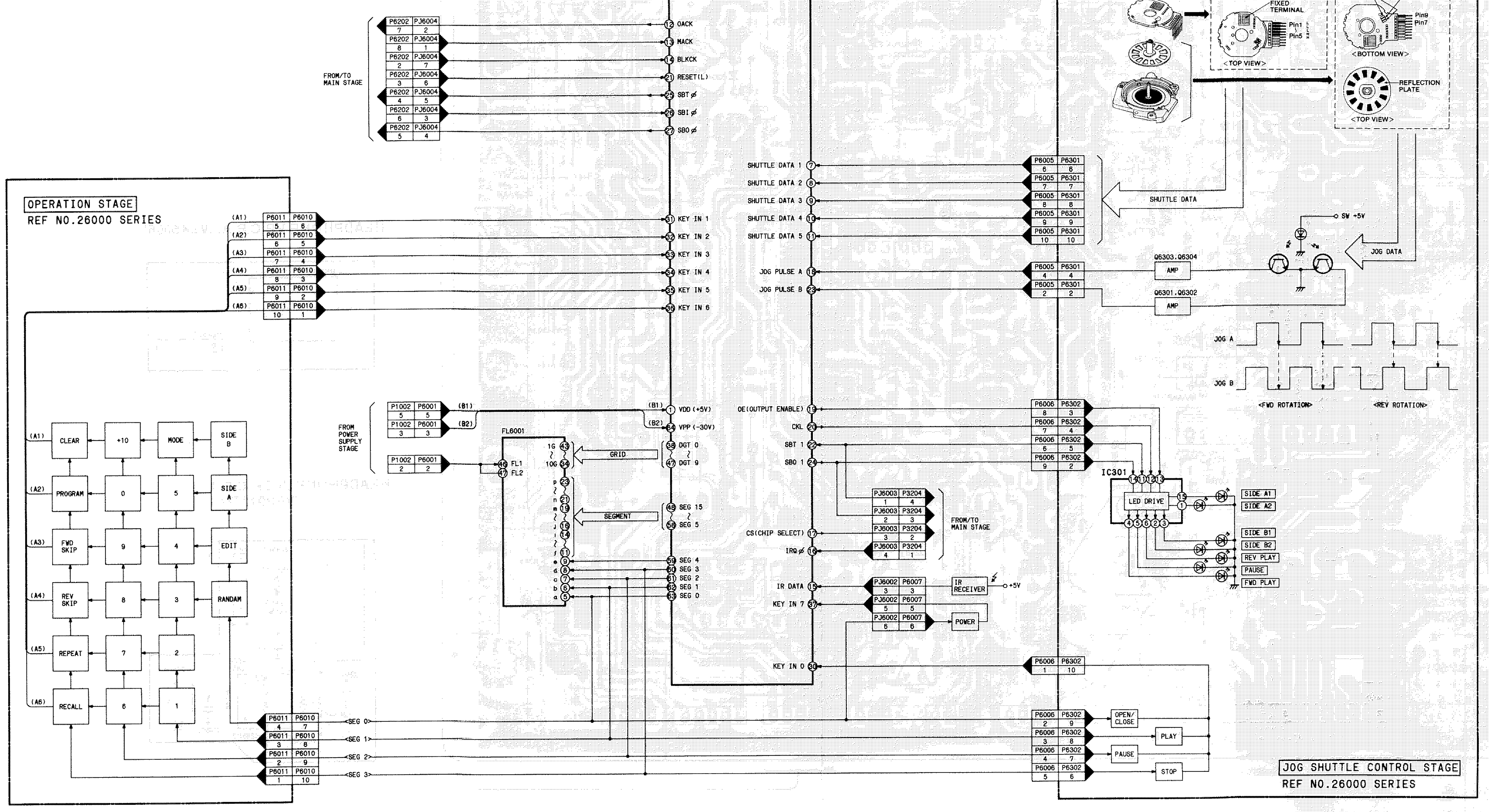
Back Page:
SERVO & SYSTEM CONTROL BLOCK

3-6. FL, OPERATION & JOG/SHUTTLE CONTROL BLOCK DIAGRAM

<SHUTTLE DATA INPUT SIGNAL>

		REVERSE											FORWARD										
LD	PLAY	×20		×15		×10	×2		×1			PLAY		×2					×10	×15		×20	
	PAUSE	×20	×15	×10		×1	×1/2		×1/8		×1/30	PAUSE		×1/30	×1/8		×1/2		×1	×10		×15	×20
CD/CDV		FAST SPEED					SLOW SPEED					PLAY/PAUSE		SLOW SPEED					FAST SPEED				
DATA 1		H	L	L	H	H	L	L	H	H	L	L	L	L	H	H	L	L	H	H	L	L	H
DATA 2		L	L	H	H	H	H	L	L	L	L	H	H	L	L	L	L	H	H	H	H	L	L
DATA 3		L	L	L	L	L	L	L	L	H	H	H	H	H	H	L	L	L	L	L	L	L	L
DATA 4		L	L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L
DATA 5		L	L	L	L	L	L	L	L	L	L	L	H	H	H	H	H	H	H	H	H	H	H

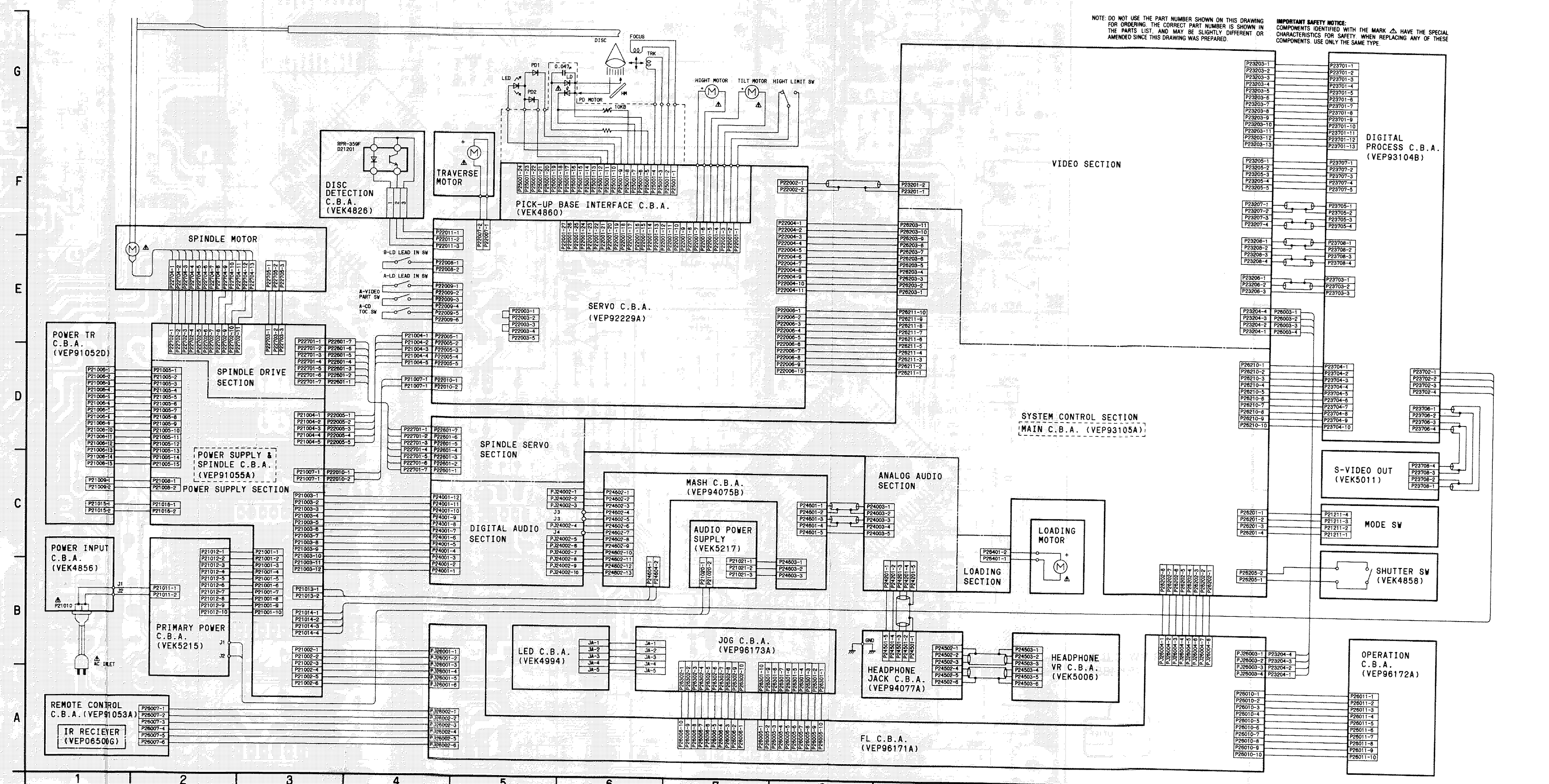
NOTE: THE PLAYBACK SPEEDS AT THE SHUTTLE RING POSITIONS ARE DIFFERENT WHEN THE JOG/SHUTTLE BUTTON IS PRESSED ON THE REMOTE CONTROLLER DURING PLAYBACK AND WHEN IT IS PRESSED IN THE PAUSE PLAYBACK MODE.



3-7. INTERCONNECTION SCHEMATIC DIAGRAM

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

IMPORTANT SAFETY NOTICE: COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.



3-8. MAIN (VIDEO/EFM/ANALOG AUDIO/DIGITAL AUDIO/SYSTEM CONTROL/SPINDLE SERVO/LOADING) C.B.A. (VEP93105A)

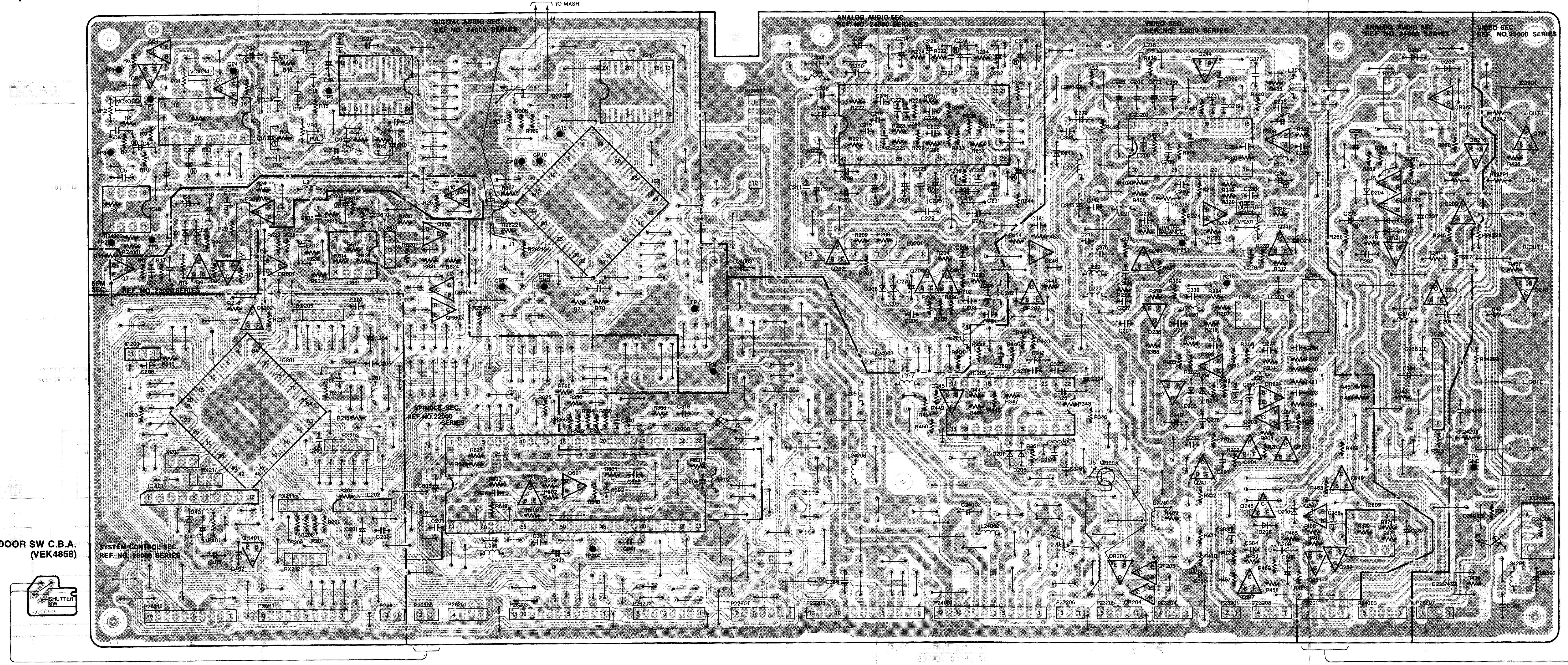
E

D

C

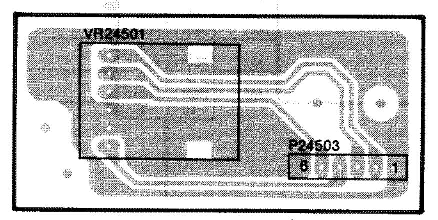
B

A

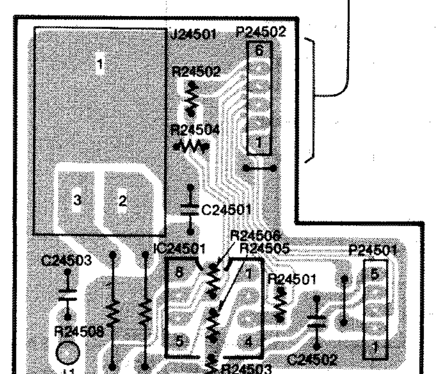


DOOR SW C.B.A.
(VEK4858)

HEADPHONE VR C.B.A. (VEK5006)



HEADPHONE JACK C.B.A.
(VEP94077A)



1 2 3 4 5 6 7 8 9 10 11 12 13 14

Back Page:
FL, OPERATION & JOG/SHUTTLE
CTL BLOCK, INTERCONNECTION

3-9. SYSTEM CONTROL/LOADING/SPINDLE SERVO SCHEMATIC DIAGRAM (MAIN 1/3)

MAIN C.B.A. (VIDEO SECTION)	
Transistor	
Q23201	B-10
Q23202	B-10
Q23203	B-10
Q23204	D-10
Q23205	D-9
Q23206	C-10
Q23209	D-10
Q23212	C-10
Q23215	D-8
Q23236	C-9
Q23239	D-10
Q23241	B-10
Q23242	E-12
Q23243	C-12
Q23244	E-10
Q23245	C-8
Q23246	D-9
Q23247	A-10
Q23248	B-10
Q23249	B-11
Q23250	B-11
Q23251	A-11
Q23252	A-11
Transistor & Resistor	
QR23201	C-10
QR23204	A-9
QR23205	A-10
QR23206	A-9
QR23207	C-9
Integrated Circuit	
IC23201	E-10
IC23205	C-8
IC23208	B-6
IC23209	B-11
Test Point	
TP23211	D-10
TP23214	A-5
TP23215	D-10
TPAGND	B-12
Adjustment	
VR23201	D-10
VR23208	D-10
Connector	
P23201	A-12
P23203	A-7
P23204	A-10
P23205	A-9
P23206	A-9
P23208	A-10

ADDRESS INFORMATION

MAIN C.B.A. (EFM SECTION)	
Transistor	
Q23006	D-2
Q23007	D-2
Q23010	D-4
Q23013	D-3
Q23014	D-3

ADDRESS INFORMATION

MAIN C.B.A. (ANALOG AUDIO SECTION)	
Transistor	
Q24209	D-12
Q24210	C-12
Transistor & Resistor	
QR24211	
QR24212	E-12
QR24213	D-11
QR24214	D-11
QR24215	E-12
Integrated Circuit	
IC24201	E-8
IC24206	B-12
IC24207	C-12
Connector	
P24201	A-11

ADDRESS INFORMATION

MAIN C.B.A. (DIGITAL AUDIO SECTION)	
Transistor	
Q24001	E-2
Q24201	D-8
Q24202	D-7
Transistor & Resistor	
QR24001	E-2
QR24002	E-2
Integrated Circuit	
IC24001	E-2
IC24002	E-4
IC24003	D-6
IC24015	E-6
IC24016	D-2
Test Point	
TP24001	E-2
TP24002	D-2
TP24003	D-2
TP24004	E-3
TP24005	E-2
TP24006	E-3
TP24007	C-6
TP24008	D-2
TP24016	C-6
Adjustment	
VR24001	E-2
VR24002	E-2
VR24003	E-3
CP24009	D-5
CP24010	D-5
CP24015	E-5
CP24017	C-5
CPGND	C-5
Connector	
P24001	A-8
P24003	A-11
PJ24002	E-7

ADDRESS INFORMATION

MAIN C.B.A. (SYSTEM CONTROL SECTION)	
Transistor & Resistor	
QR26202	C-3
QR26401	B-3
Integrated Circuit	
IC26201	C-3
IC26202	B-4
IC26203	C-2
IC26401	B-2
Connector	
P26201	A-4
P26202	A-6
P26203	A-5
P26205	A-4
P26210	A-2
P26211	A-3
P26401	A-4

ADDRESS INFORMATION

MAIN C.B.A. (SPINDLE SECTION)	
Transistor	
Q22601	B-5
Q22602	B-5
Q22603	D-4
Q22606	D-4
Transistor & Resistor	
QR22604	C-4
QR22605	C-4
QR22607	D-3
Integrated Circuit	
IC22601	D-3
Connector	
P22601	A-7

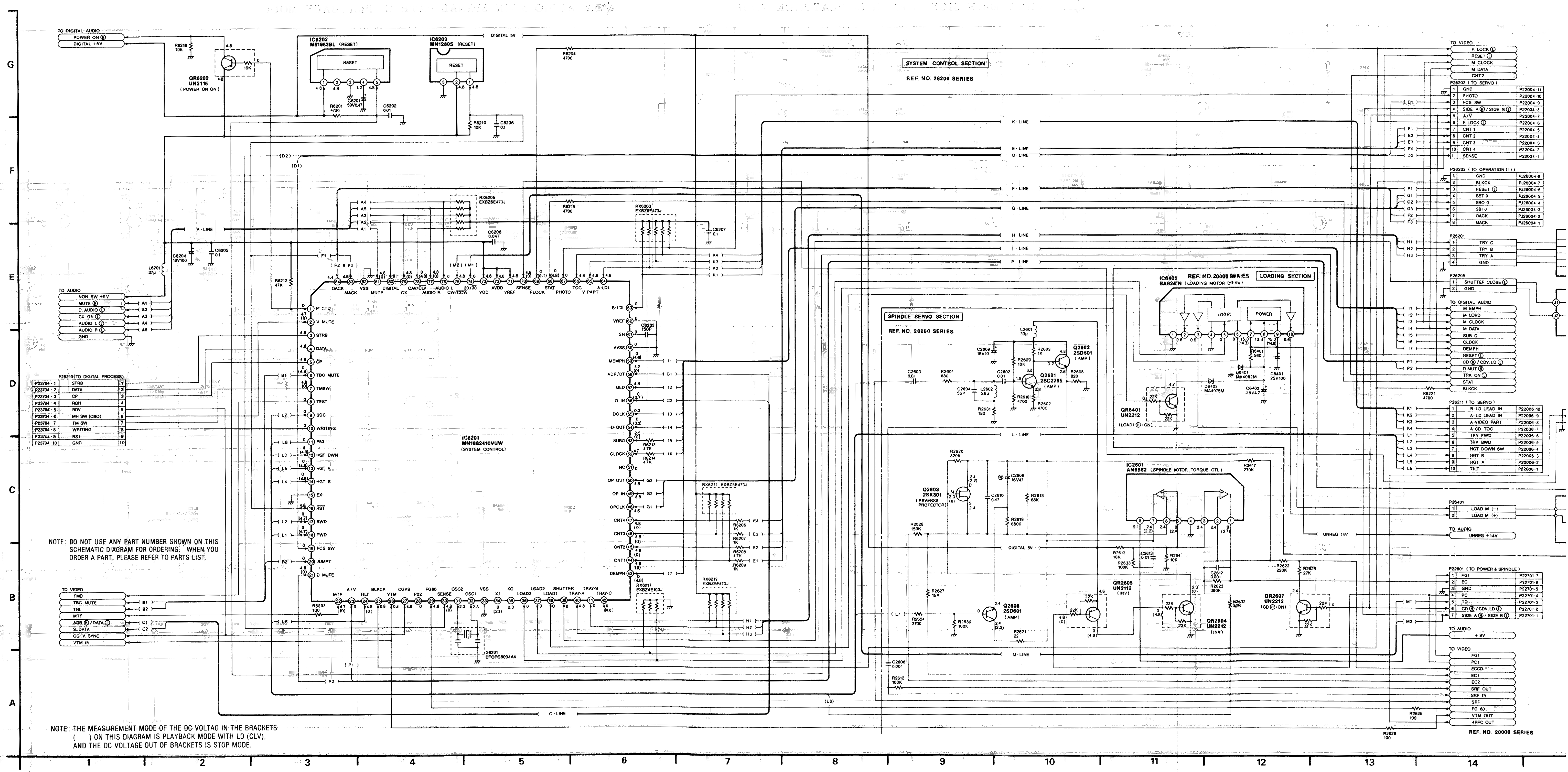
ADDRESS INFORMATION

HEAD PHONE JACK C.B.A.	
Integrated Circuit	
IC24501	A-13
Connector	
P24501	A-14
P24502	B-13

ADDRESS INFORMATION

HEADPHONE VR C.B.A.	
Connector	
P24503	C-14
Adjustment	
VR24501	C-13


ADDRESS INFORMATION



3-10. VIDEO SCHEMATIC DIAGRAM (MAIN 2/3)

⇦ VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

⬅ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


NOTE: THE MEASUREMENT MODE OF THE DC VOLTAG IN THE BRACKETS ( ) ON THIS DIAGRAM IS PLAYBACK MODE WITH LD (CLV), AND THE DC VOLTAGE OUT OF BRACKETS IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

Back Page:
SYSTEM CONTROL

3-11. ANALOG AUDIO & DIGITAL AUDIO SCHEMATIC DIAGRAM (MAIN 3/3)




NOTE: THE MEASUREMENT MODE OF THE DC VOLTAG IN THE BRACKETS ( ) ON THIS DIAGRAM IS PLAYBACK MODE WITH LD (CLV), AND THE DC VOLTAGE OUT OF BRACKETS IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

REF. NO. 20000 SERIES

Next Page:
DIGITAL PROCESS


3-12. DIGITAL PROCESS SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAG IN THE BRACKETS ( ) ON THIS DIAGRAM IS PLAYBACK MODE WITH LD (CLV), AND THE DC VOLTAGE OUT OF BRACKETS IS STOP MODE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

3-13. DIGITAL PROCESS C.B.A. (VEP93104B)




DIGITAL PROCESS C.		
Transistor		IC237
Q23701	A-7	IC237
Q23702	B-7	IC237
Q23704	B-7	IC237
Q23705	B-7	IC237
Q23706	C-7	IC237
Q23707	A-8	IC237
Q23708	C-2	IC237
Q23709	C-11	IC237
Q23710	C-2	IC237
Q23711	C-11	IC237
Q23712	B-11	IC237
Q23713	B-11	IC237
Q23714	B-11	IC237
Q23715	B-10	**Test Po**
Q23716	B-10	TP237
Q23718	B-10	TP237
Q23719	B-3	TP237
Q23720	B-10	TP237
Q23721	B-10	TR237
Q23722	B-10	TR237
Q23723	B-10	TR237
Q23724	A-4	TR237
Q23725	A-4	TR237
Q23727	A-3	TR237
Q23728	A-10	TR237
Q23731	B-10	TR237
Q23732	B-8	TR237
Q23733	B-7	**Adjustn**
Q23738	C-11	CT237
Q23739	B-10	CT237
Q23743	C-3	VR237
Q23744	C-10	VR237
Q23745	A-11	**Connec**
Q23746	B-10	P2370
Q23747	B-3	P2370
Transistor & Resistor		P2370
QR23701	A-4	P2370
QR23703	A-3	P2370
QR23717	B-3	P2370
Integrated Circuit		P2370
IC23701	B-6	PJ237
IC23702	B-6	
IC23703	B-5	

ADDRESS INFORMATION

3-14. MASH C.B.A. (VEP94075B)

MASH C.B.A.	
Transistor	
Q24601	B-4
Q24602	B-4
Q24603	B-5
Q24604	B-5
Q24607	B-2
Transistor & Resistor	
QR24601	B-5
QR24602	B-5
QR24603	B-10
QR24606	B-6
QR24608	B-10
Integrated Circuit	
IC24601	B-3
IC24602	B-3
IC24603	B-3
IC24604	B-9
IC24605	B-5
IC24606	B-5
IC24607	B-8
IC24608	B-3
IC24609	B-4
IC24610	B-3
IC24611	B-8
IC24612	B-7
IC24613	B-2
IC24614	B-4
IC24615	A-7
Connector	
P24601	B-4
P24602	B-1
P24603	B-5
P24604	B-2

ADDRESS INFORMATION



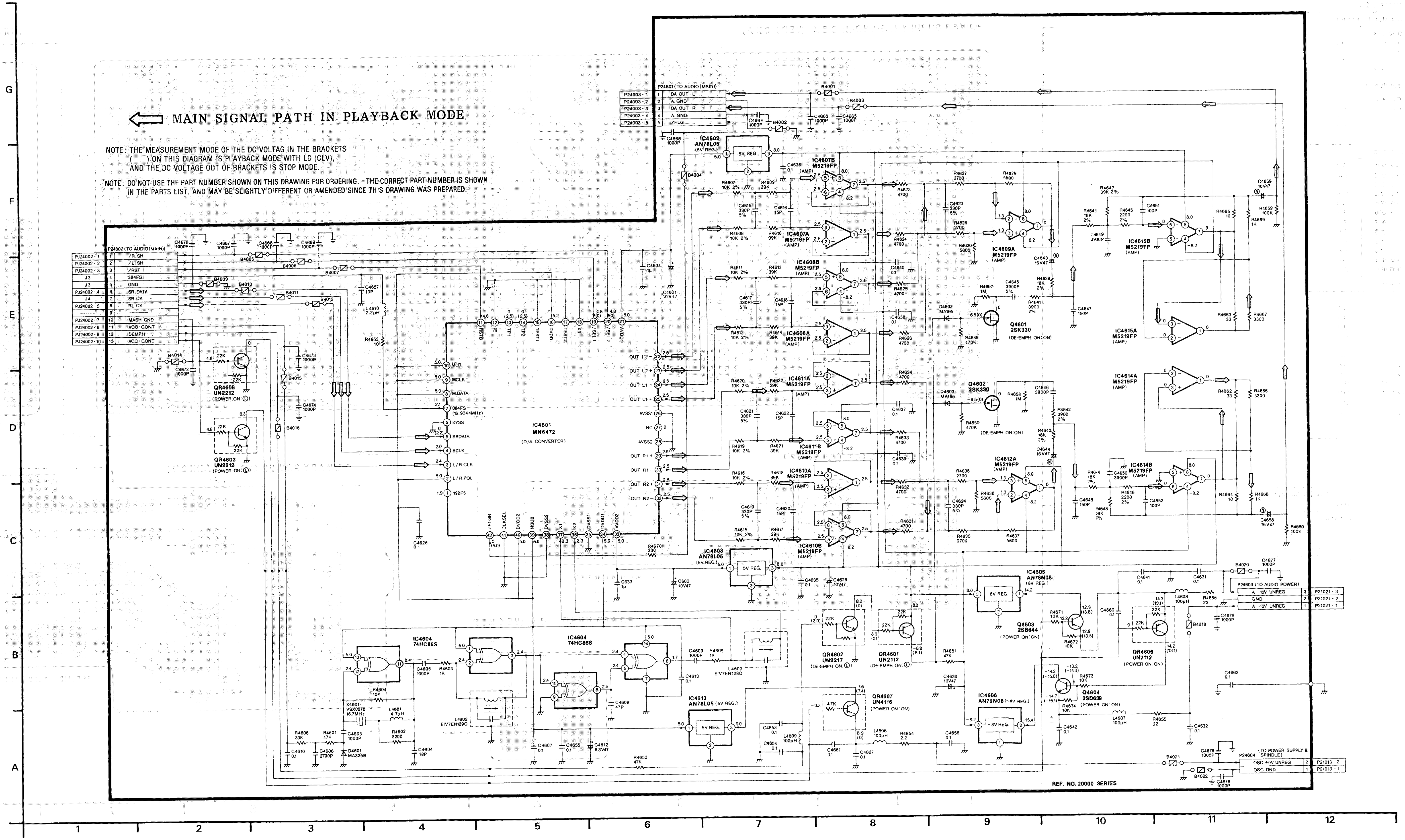
Back Page:
DIGITAL PROCESS

3-15. MASH SCHEMATIC DIAGRAM

⇐ MAIN SIGNAL PATH IN PLAYBACK MODE

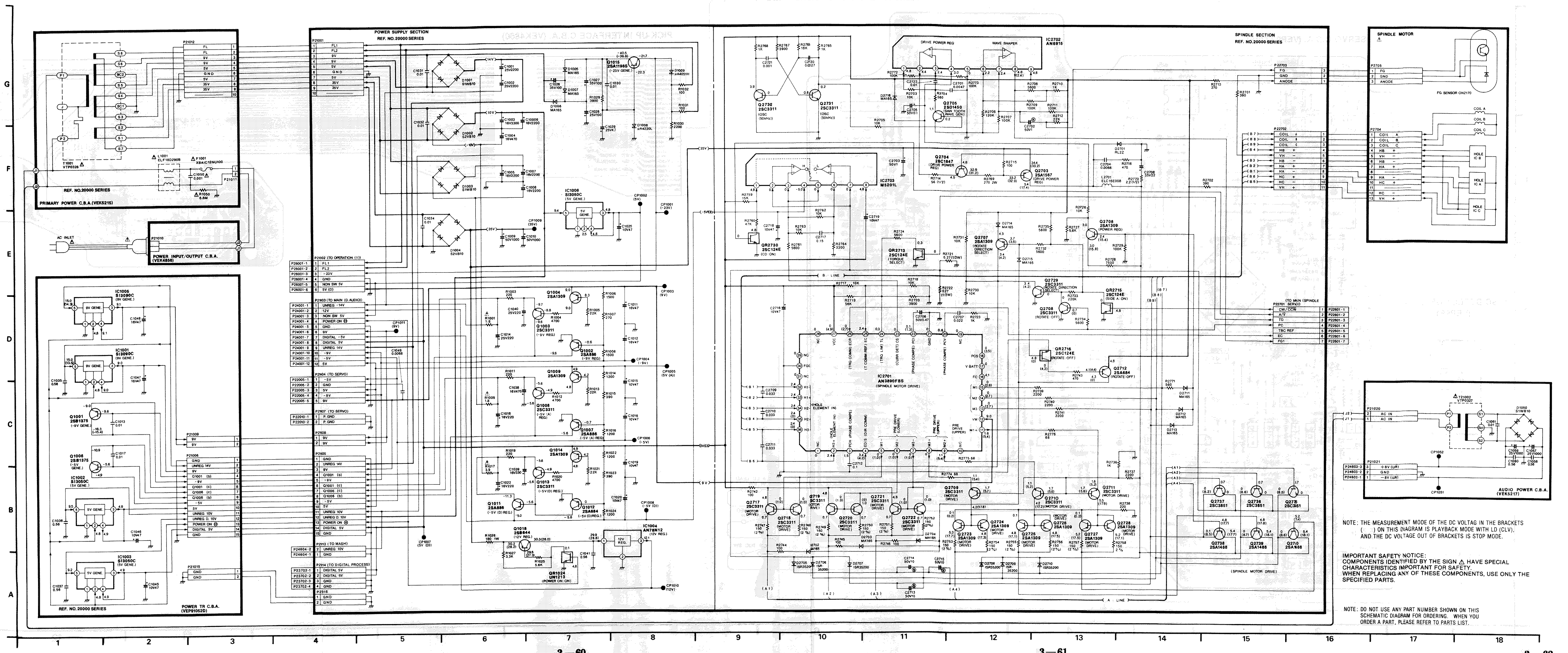
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAG IN THE BRACKETS ( ) ON THIS DIAGRAM IS PLAYBACK MODE WITH LD (CLV), AND THE DC VOLTAGE OUT OF BRACKETS IS STOP MODE.

NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.



Back Page:
POWER SUPPLY & SPINDLE

3-17. POWER SUPPLY & SPINDLE/PRIMARY/POWER/ POWER TR SCHEMATIC DIAGRAM



NOTE: THE MEASUREMENT MODE OF THE DC VOLTAG IN THE BRACKETS ( ) ON THIS DIAGRAM IS PLAYBACK MODE WITH LD (CLV), AND THE DC VOLTAGE OUT OF BRACKETS IS STOP MODE.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN △ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

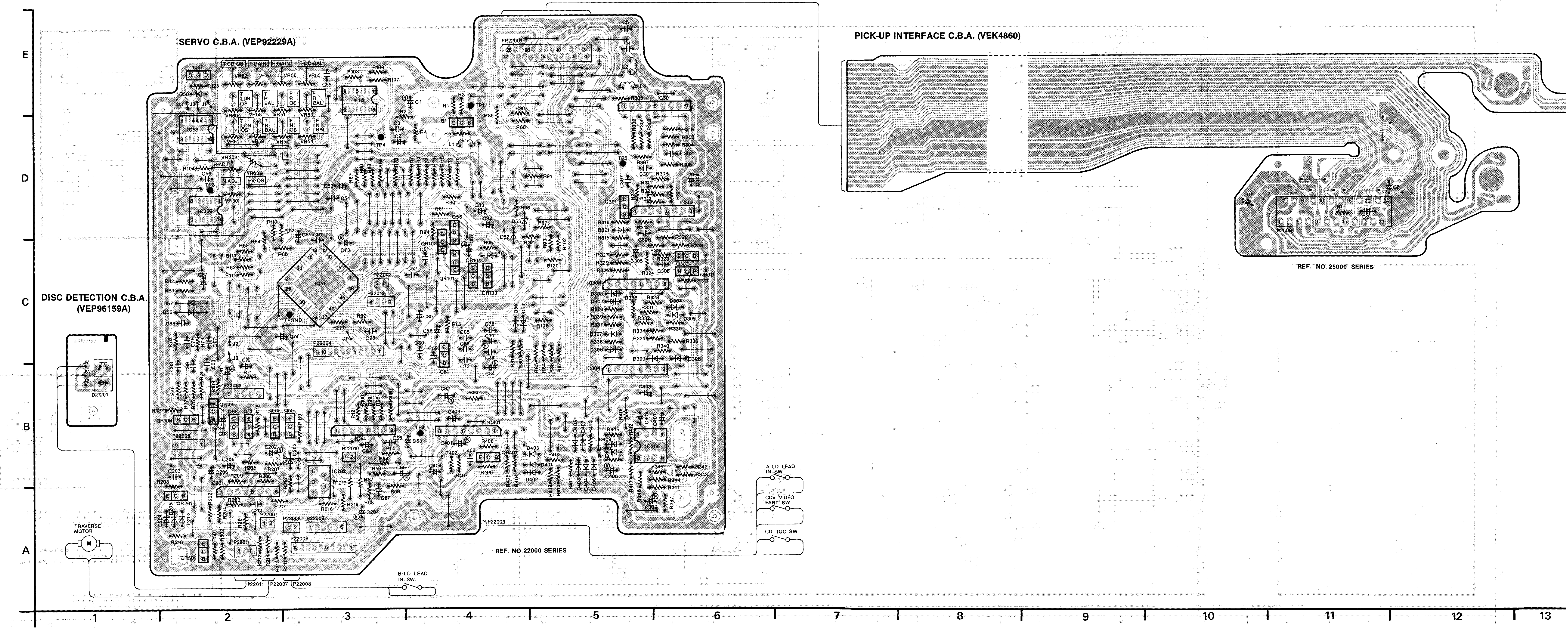
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

3-18. SERVO C.B.A. (VEP92229A)


SERVO C.B.A.	
Transistor	
Q22001	D-4
Q22051	B-4
Q22052	B-2
Q22053	B-2
Q22054	B-2
Q22055	B-3
Q22056	D-4
Q22057	E-2
Q22301	D-5
Q22302	C-6
Transistor & Resistor	
QR22101	C-4
QR22102	C-4
QR22103	C-4
QR22104	C-4
QR22105	B-2
QR22106	B-2
QR22201	A-2
QR22311	C-6
QR22401	B-4
QR22501	A-2
Integrated Circuit	
IC22051	C-3
IC22052	E-3
IC22053	D-2
IC22054	B-3
IC22201	B-2
IC22202	B-3
IC22301	E-6
IC22302	E-6
IC22303	C-5
IC22304	B-5
IC22305	B-6
IC22306	D-2
IC22401	B-4
Test Point	
TP22001	E-4
TP22002	B-4
TP22003	D-2
TP22004	D-3
TP22005	D-5
TP GND	C-3
Adjustment	
VR22051	D-2
VR22052	D-3
VR22053	D-3
VR22054	D-3
VR22055	E-3
VR22056	E-3
VR22057	E-2
VR22058	D-2
VR22059	D-2
VR22060	D-2
VR22061	D-2
VR22062	E-2
VR22063	D-2
VR22301	D-2
VR22302	D-2
Connector	
FP22001	E-4
P22002	C-3
P22003	B-2
P22004	C-3
P22005	B-2
P22006	A-3
P22007	A-2
P22008	A-3
P22009	A-3
P22010	B-3
P22011	A-2
P22012	C-3

ADDRESS INFORMATION

Back Page: POWER



3-19. SERVO SCHEMATIC DIAGRAM



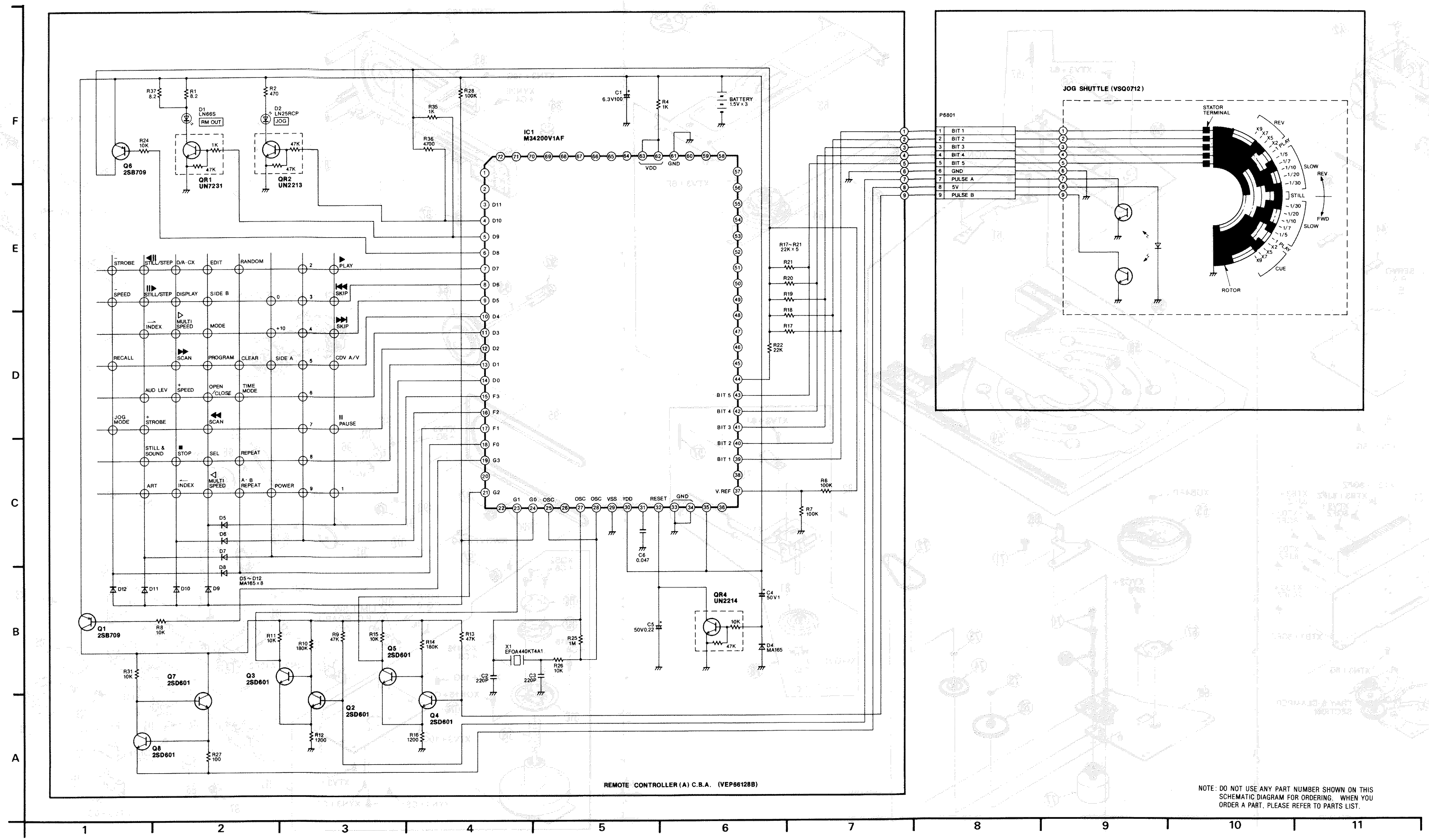
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAG IN THE BRACKETS ( ) ON THIS DIAGRAM IS PLAYBACK MODE WITH LD (CLV), AND THE DC VOLTAGE OUT OF BRACKETS IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED BY THE SIGN ⚠ HAVE SPECIAL CHARACTERISTICS IMPORTANT FOR SAFETY. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SPECIFIED PARTS.

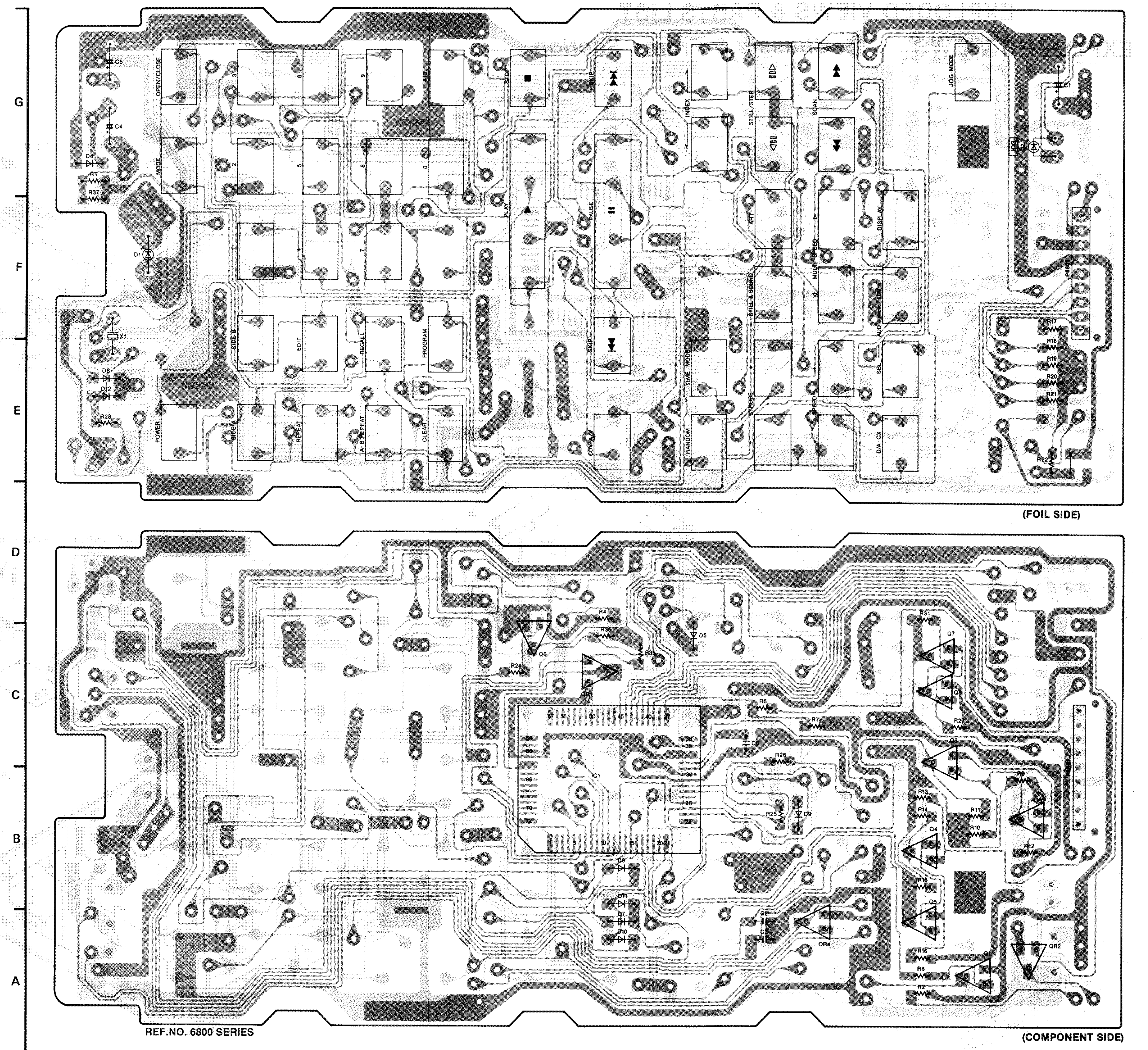
Next Page: FL/OPERATION/JOG

3-22. REMOTE CONTROLLER SCHEMATIC DIAGRAM



NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

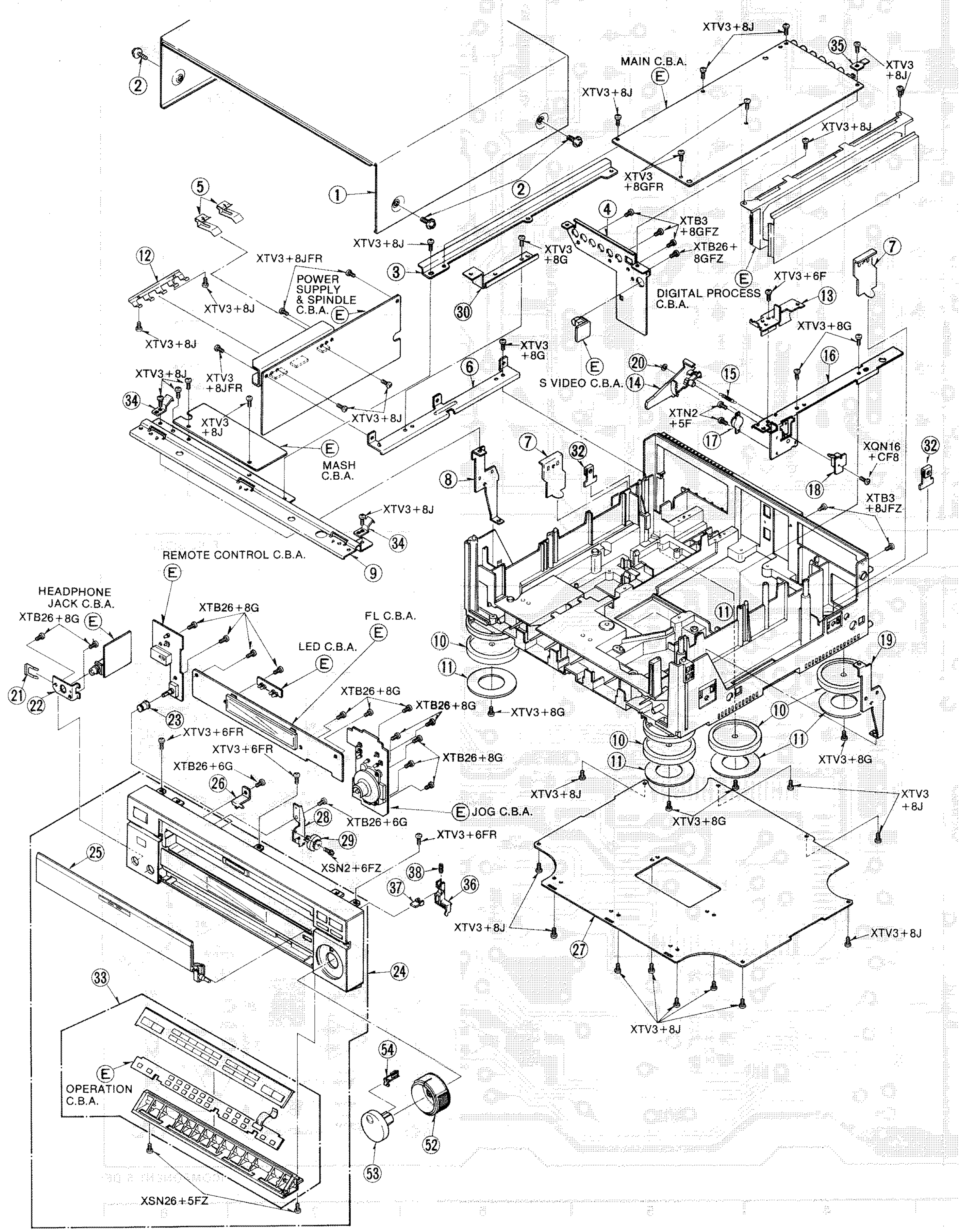
3-23. REMOTE CONTROLLER C.B.A. (VEP66128B)



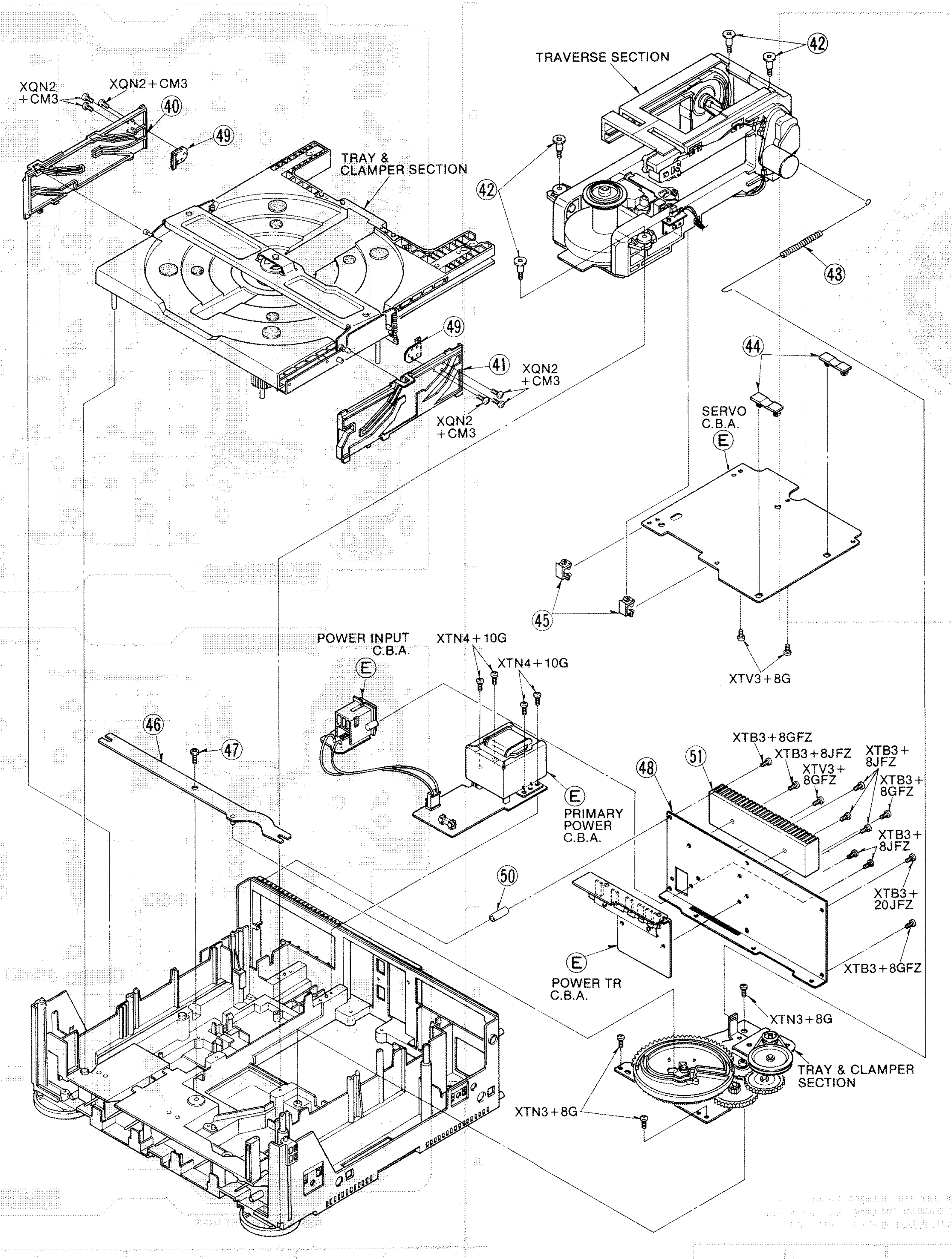
Section 4
EXPLODED VIEWS & PARTS LIST

4-1. EXPLODED VIEWS

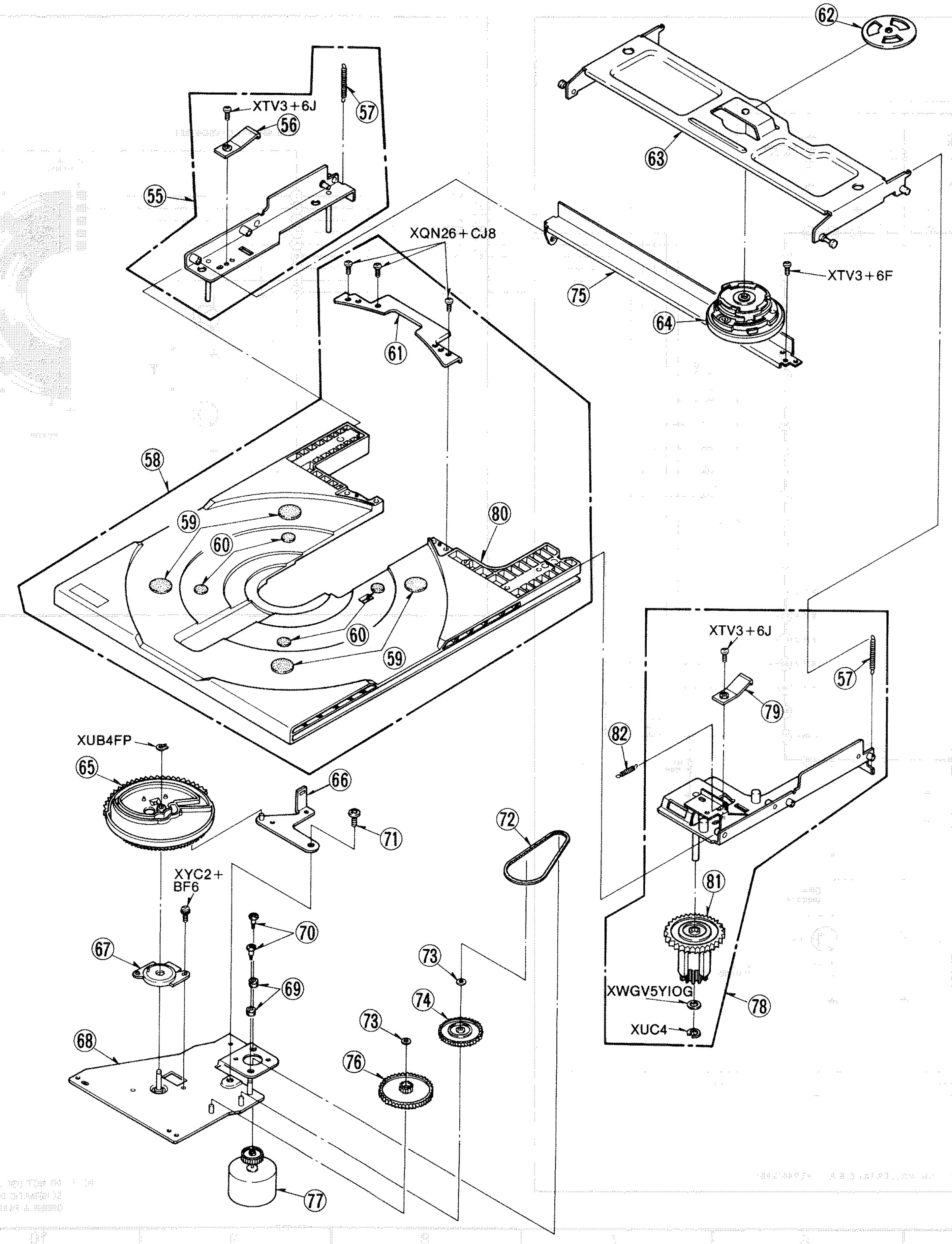
❶ Chassis & Frame Section



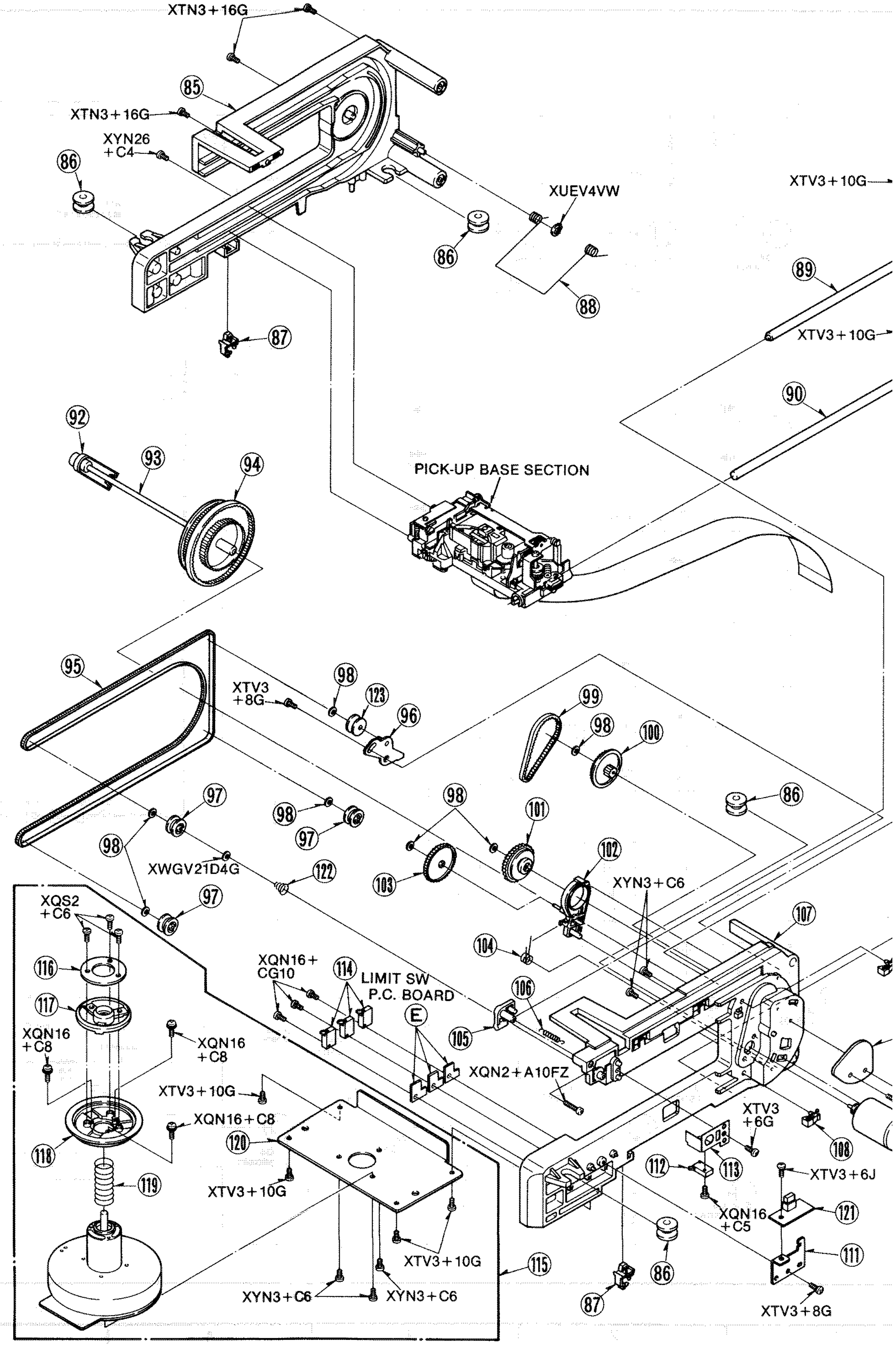
❷ Mechanism Section



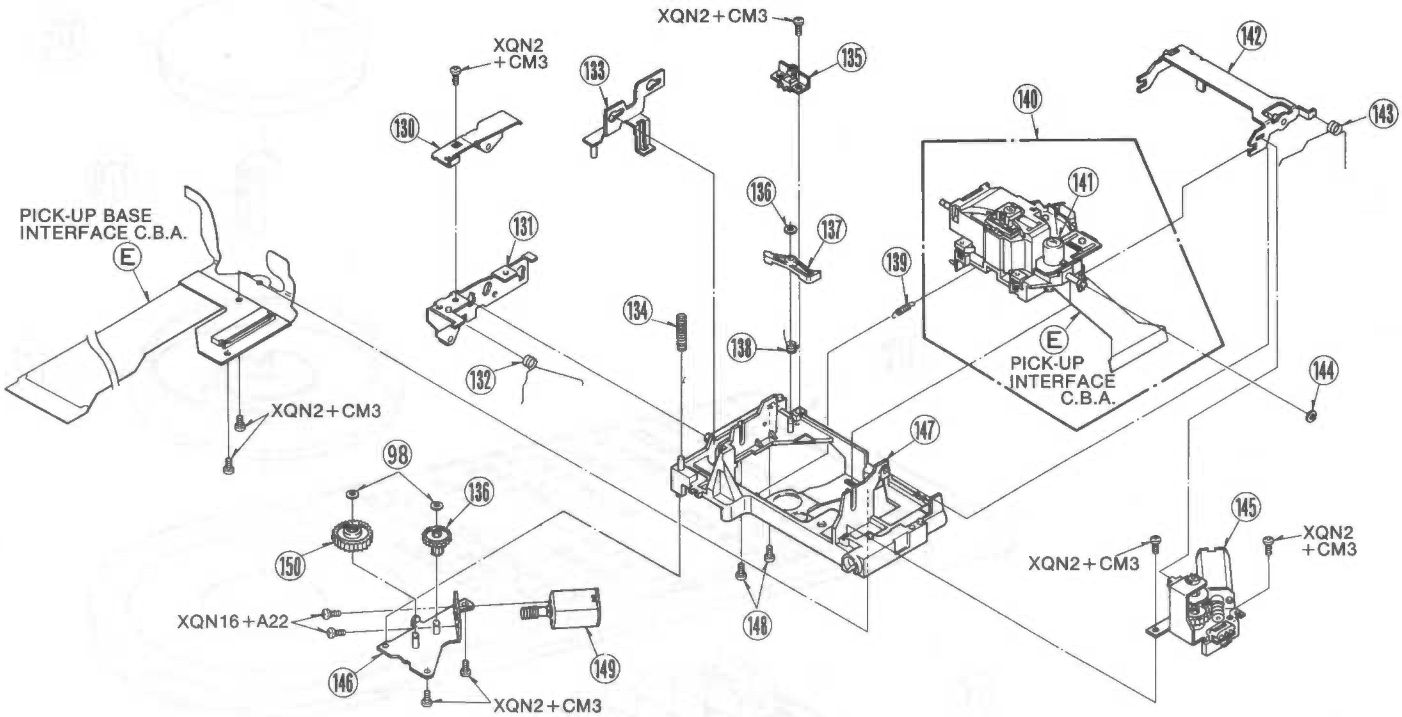
❸ Tray & Clamper Section



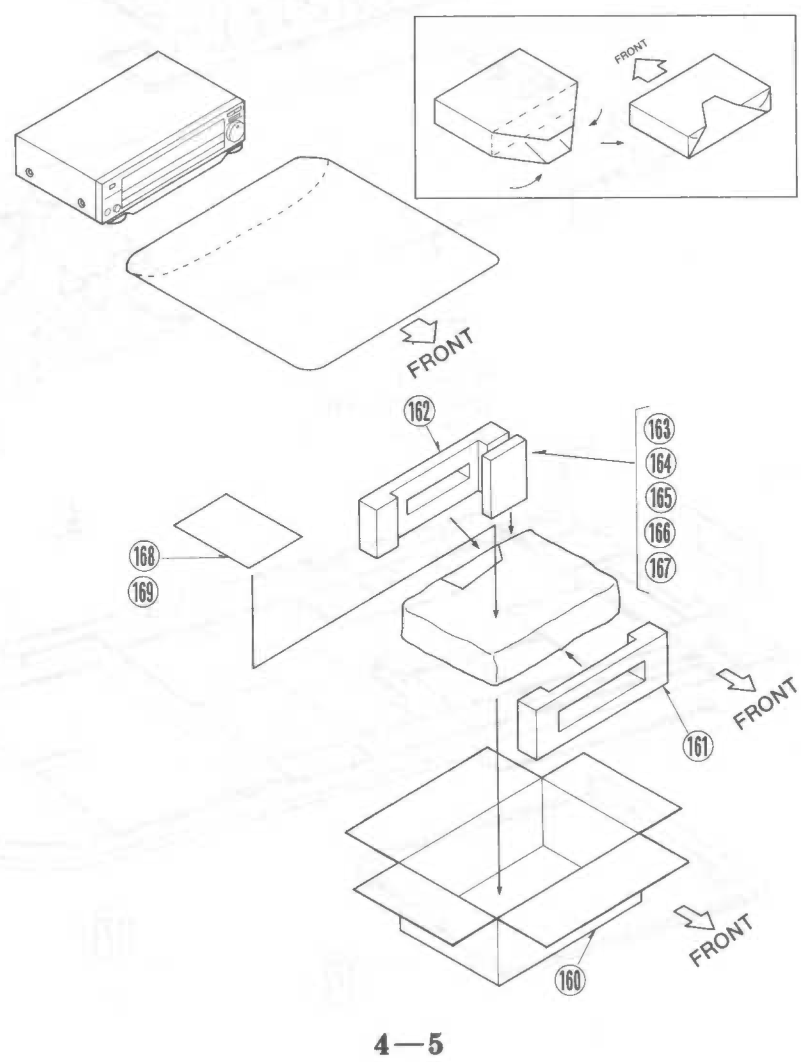
❹ Traverse Section



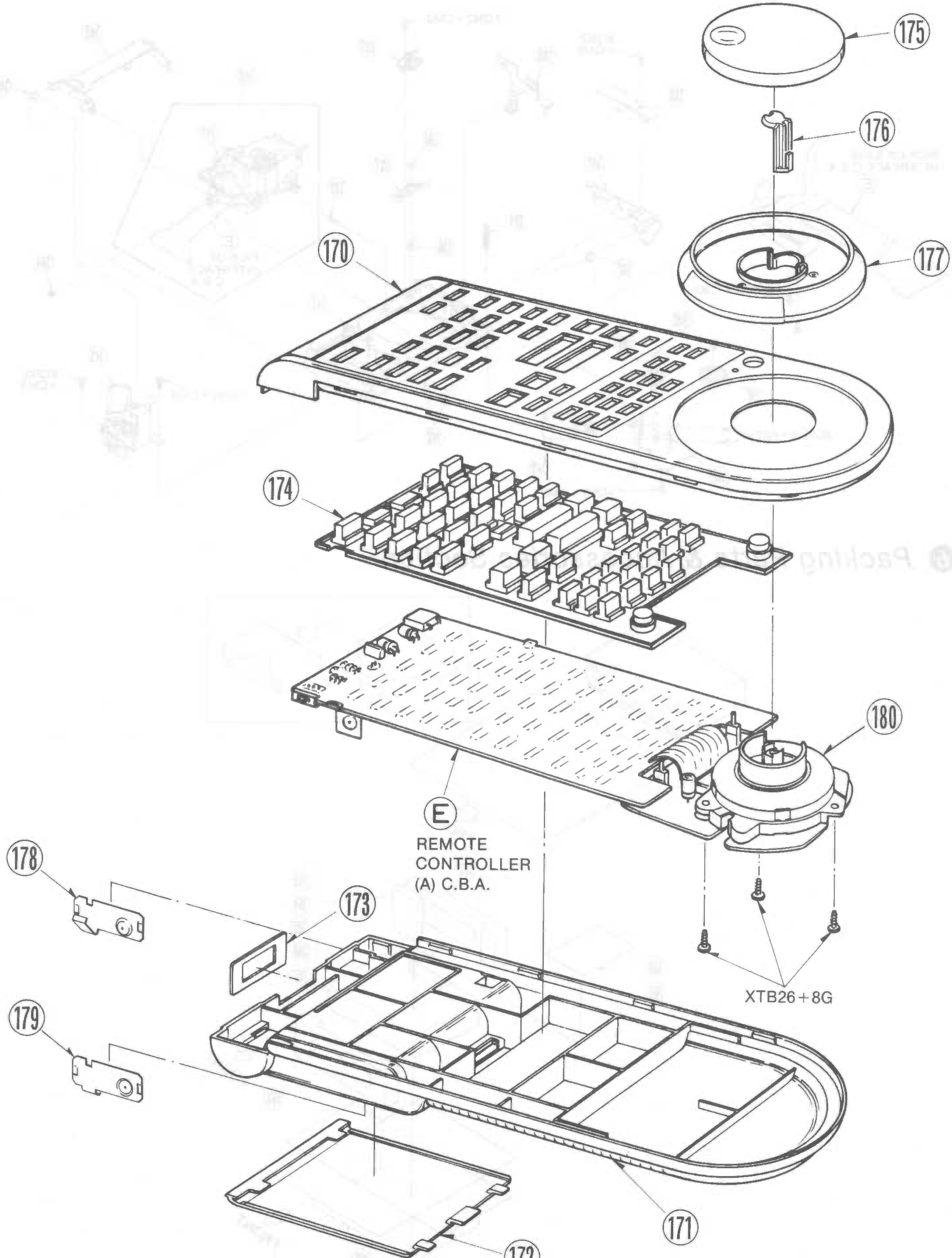
❺ Pick-up Base Section



❻ Packing Parts & Accessories Section



❼ *IR Remote Control Unit.*



4-2. MECHANICAL REPLACEMENT PARTS LIST

Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1(1)	VGM0705	TOP COVER	1	
2(1)	VHD0165	SCREW	4	
3(1)	VMP2627	MAIN C.B.A. ANGLE	1	
4(1)	VGM0741	REAR PANEL (R)	1	
5(1)	VMC0587	TRANSISTOR HOLD SPRING	2	
6(1)	VMA8156	RACK GUIDE PLATE (L)	1	
7(1)	VMA8154	TOP COVER ANGLE (C)	2	
8(1)	VMA8152	TOP COVER ANGLE (A)	1	
9(1)	VMA8155	FRONT ANGLE	1	
10(1)	VGK1922	DECORATION RING	4	
11(1)	VMT0330	RUBBER FOOT	4	
12(1)	VMC0393	TR HOLD SPRING	1	
13(1)	VMA8198	FRAME SUPPORT PLATE	1	
14(1)	VML2381	DOOR LEVER	1	
15(1)	VMB2122	DOOR LEVER SPRING	1	
16(1)	VXA4056	RACK GUIDE PLATE (R)1	1	
17(1)	VDG0678	DUMPER	1	
18(1)	VEK4858	DOOR SWITCH	1	
19(1)	VMA8153	TOP COVER ANGLE (B)	1	
20(1)	VMX1438	SPACER	1	
21(1)	VMC0382	SNAP PLATE	1	
22(1)	VMP2628	HEADPHONE PLATE	1	
23(1)	RGW0020	BALANCE KNOB	1	
24(1)	VYP3327	FRONT PANEL UNIT	1	
25(1)	VYF1595	DOOR (1) UNIT	1	
26(1)	VMS4146	DOOR HINGE	1	
27(1)	VKU0342	BOTTOM PLATE	1	
28(1)	VMP2756	DAMPER ANGLE	1	
29(1)	VDG0604	DAMPER	1	
30(1)	VMA8284	RACK GUIDE ANGLE	1	
32(1)	VMC0668	EARTH PLATE	2	
33(1)	VYQ0510	OPERATION POCKET	1	
34(1)	VMC0667	ANGLE (A)	2	
35(1)	VMC0683	ANGLE (B)	2	
36(1)	VML2449	BUTTON CASE HOOK	1	
37(1)	VGU5203	PUSH BUTTON	1	
38(1)	VMB1963	COIL SPRING	1	
40(2)	VMD1548	RACK PLATE (L)	1	
41(2)	VMD1547	RACK PLATE (R)	1	
42(2)	VHD0583	SCREW	4	
43(2)	VMB2121	CLUTCH SPRING	1	
44(2)	VKC0118	HINGE	5	
45(2)	VJF0844	PIERCING HOLDER	2	
46(2)	VXA4051	JOINT PLATE	1	
47(2)	VHD0590	SCREW	1	
48(2)	VGM0716	REAR PANEL (L)	1	
49(2)	VMA8296	RACK PLATE ANGLE	2	
50(2)	VMX1936	EARTH COLLAR	1	
51(2)	VSC3160	HEAT SINK	1	
52(1)	VGU5349	SHUTTLE KNOB	1	
53(1)	VGU5350	JOG DIAL	1	
54(1)	VMC0444	JOG DIAL SPRING	1	
55(3)	VXA4049	TRAY GUIDE PLATE (L)	1	
56(3)	VMD1541	TRAY STOPPER	1	
57(3)	VMB2118	CHARGE SPRING	2	
58(3)	VXQ0243	TRAY UNIT	1	
59(3)	VMT0318	DISC PROTECTION SHEET (A)	1	
60(3)	VMT0319	DISC PROTECTION SHEET (B)	1	
61(3)	VMA8144	TRAY SUPPORT PLATE	1	
62(3)	VXQ0226	HANGER (1)	1	
63(3)	VXA4054	CLAMP PLATE (2)	1	
64(3)	VXQ0222	CLAMPER	1	
65(3)	VDK0026	LOADING CAM	1	
66(3)	VXA4048	CLUTCH LEVER	1	
67(3)	VSR0078	MODE SW	1	
68(3)	VXA4047	TRAY DRIVE BASE (1)	1	
69(3)	SRGC001N01	MOTOR CUSHION RUBBER	1	
70(3)	VHD0408	SCREW	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
71(3)	VHD0407	SCREW	1	
72(3)	VDV0222	BELT (B)	1	
73(3)	VMX1438	SPACER	2	
74(3)	VDG0660	PULLEY GEAR (B)	1	
75(3)	VMA8309	SHUTTER	1	
76(3)	VDG0661	BRAKE GEAR (A)	1	
77(3)	VEM0369	LOADING MOTOR	1	<!>
78(3)	VXA4050	TRAY GUIDE PLATE (R)	1	
79(3)	VMD1541	TRAY STOPPER	1	
80(3)	VGQ2041	TRAY	1	
81(3)	VDG0659	TRAY DRIVE GEAR	1	
82(3)	VMB2254	SHUTTER SPRING	1	
85(4)	VMD1537	GUIDE BASE (L)	1	
86(4)	VMG0539	FLOATING RUBBER (A)	3	
87(4)	VJF0844	PIERCING HOLDER	3	
88(4)	VMB2117	FLEX. CABLE HOLD SPRING	1	
89(4)	VMS4306	GUIDE SHAFT (B)	1	
90(4)	VMS4305	GUIDE SHAFT (A)	1	
91(4)	VMD1534	SHAFT BEARING (A)	2	
92(4)	VDP1310	LINK PULLEY	1	
93(4)	VMS4308	LINK SHAFT	1	
94(4)	VXP1186	FORWARD BELT PULLEY	1	
95(4)	VXQ0221	FORWARD BELT UNIT	1	
96(4)	VXA4043	TENSION ARM (1)	1	
97(4)	VDP1307	BELT ROLLER	1	
98(4)	VMX1454	SNAP WASHER (C)	9	
99(4)	VDV0214	MOTOR BELT (A)	1	
100(4)	VDG0656	PULLEY GEAR (A)	1	
101(4)	VXP1185	BRAKE GEAR	1	
102(4)	VXQ0219	TRANSMISSION GEAR BASE	1	
103(4)	VDG0658	TRANSMISSION GEAR	1	
104(4)	VMB2116	SPRING	1	
106(4)	VMB2115	PRESSURE SPRING	1	
107(4)	VXK0983	GUIDE BASE 1 (R)	1	
108(4)	VJF0610	CLAMPER	2	
109(4)	VMA8265	HOLDER PLATE	1	
110(4)	VEM0368	FORWARD MOTOR	1	<!>
111(4)	VMA8141	SENSOR BASE	1	
112(4)	VSH0045	LIMIT LEAF SWITCH	1	
113(4)	VMC0580	SWITCH ANGLE	1	
114(4)	VSH0037	LEAF SWITCH	3	
115(4)	VEM0362	SPINDLE MOTOR	1	<!>
116(4)	VMA8143	MAGNET PLATE	1	
117(4)	VXP1173	CENTRE RING (A)	1	
118(4)	VMD1538	TURN TABLE	1	
119(4)	VMB2015	SENSOR RING SPRING	1	
120(4)	VMA8142	MOTOR BASE	1	
121(4)	VEK4826	DISC DETECTOR	1	
122(4)	VMB2127	ROLLER SPRING	1	
123(4)	VDP1307	BELT ROLLER	1	
130(5)	VXA4040	ROLLER BASE (B)	1	
131(5)	VXA4039	ROLLER BASE (A)	1	
132(5)	VMB2111	HEIGHT COIL SPRING (B)	1	
133(5)	VXA4037	TILT LEVER	1	
134(5)	VMB2109	ROLLER ADJUST SPRING	1	
135(5)	VXA4033	SWITCH BASE (1)	1	
136(5)	VDG0652	TILT GEAR	1	
137(5)	VML2379	SWITCH LEVER	1	
138(5)	VMB2112	SWITCH LEVER SPRING	1	
139(5)	VMB2113	TILT TENSION SPRING	1	
140(5)	VEK4894	OPTICAL PICK-UP	1	<!>
141(5)	GP2TD01M	TILT SENSOR	1	
142(5)	VXL2028	HEIGHT JOINT PLATE	1	
143(5)	VMB2110	HEIGHT COIL SPRING (A)	1	
144(5)	VMX1793	PU SPACER	1	
145(5)	VXA4041	HEIGHT BASE	1	<!>
146(5)	VXA4036	TILT BASE (1)	1	
147(5)	VXK0981	PICK BASE (1)	1	
148(5)	VHD0600	ADJUSTING SCREW	2	
149(5)	VEM0366	TILT MOTOR	1	<!>
150(5)	VDK0025	TILT CAM	1	
160(6)	VPG5639	PACKING CASE	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
161(6)		VPN2911	CUSHION (FRONT)	1	
162(6)		VPN2912	CUSHION (REAR)	1	
163(6)		VFA0028	AV CABLE	1	
164(6)		VJA0453	4P CABLE	1	
165(6)		VJA0476	AC CORD	1	<!>
166(6)		VPK1301	ACCESSORY CASE	1	
167(6)		VEQ1185	REMOTE CONTROLLER	1	
168(6)		VQT3837	OPERATING INSTRUCTIONS	1	
169(6)		VQT3892	OPERATING INSTRUCTION SHEET	1	
170(7)		VYK3424	TOP CASE UNIT	1	
171(7)		VKM2089	BOTTOM CASE	1	
172(7)		VKF1291	BATTERY COVER	1	
173(7)		VKW0878	IR WINDOW	1	
174(7)		VSP0510	RUBBER CONTACT	1	
175(7)		VGU5025	JOG DIAL	1	
176(7)		VMC0465	JOG SPRING	1	
177(7)		VGU5026	SHUTTLE DIAL	1	
178(7)		VJR0498	ELECTRODE (A)	1	
179(7)		VJR0509	ELECTRODE (B)	1	
180(7)		VSQ0712	JOG ENCODER	1	
			FIXTURES & TOOLS		
		VFK0649	13 PIN EXTENTION CABLE	1	FOR SZZP1017F
		VFK0651	GRATING DRIVER	1	
		VFK0652	LD TEST DISC	1	
		SZZP1054C	CD TEST DISC	1	
		SZZP1017F	SERVO GAIN FIXTURE	1	
		SZZP1094C	NEW SERVO GAIN FIXTURE	1	

4-3. ELECTRICAL REPLACEMENT PARTS LIST

Note:1.* Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark <!> have the special characteristics for safety. When replacing any of these components,use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS ,K=1,000 OHMS. All capacitors are in MICRO-FARADS(uf),P=uuF.
4. The P.C.Board units marked width'■'show below the main assembled parts.
5. Printed circuit board assembly with mark(NLA) is no longer available after discontinuation of the product.

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP93105A	MAIN C.B.A.	1	<NLA>
		VEP92229A	SERVO C.B.A.	1	<NLA>
		VEP93104B	DIGITAL C.B.A.	1	<NLA>
		VEP94075B	MASH C.B.A.	1	<NLA>
		VEP98172A	OPERATION C.B.A.	1	<NLA>
		VEP96171A	FL C.B.A.	1	<NLA>
		VEP91055A	POWER SUPPLY & SPINDLE	1	<NLA>
			C.B.A.		
		VEK5217	AUDIO POWER C.B.A.	1	<NLA>
		VEK5215	PRIMARY POWER C.B.A.	1	<NLA> <!>
		VEP91052D	POWER TR C.B.A.	1	<NLA>
		VEP91053A	IR REMOTE CONTROL C.B.A.	1	<NLA>
					INCLUDING THE IR
					RECIEVER C.B.A.
					(VEP06500G).
		VEP06500G	IR RECIEVER C.B.A.	1	<NLA>
					INCLUDED IN IR REMOTE
					CONTROL C.B.A.
					(VEP91053A).
		VEK5011	S-VIDEO OUT C.B.A.	1	<NLA>
		VEK5028	POWER IN/OUT C.B.A.	1	<NLA>
		VEK4858	DOOR SW C.B.A.	1	<NLA>
		VEK4994	LED C.B.A.	1	<NLA>
		VEP96173A	JOG C.B.A.	1	<NLA>
		VEK5006	HEADPHONE VR C.B.A.	1	<NLA>
		VEP94077A	HEADPHONE C.B.A.	1	<NLA>
		VEK4860	PICK UP INTERFACE C.B.A.	1	<NLA>
		VEK4895	LIMIT SW C.B.A.	1	<NLA>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEK4826	DISC DETECT C.B.A.	1	<NLA>
		VEP66128B	REMOTE CONTROL C.B.A.	1	<NLA>
	■	VEP93105A	MAIN C.B.A.		
			CAPACITORS		
C22602,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C22604		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C22606		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C22608		ECEA1CN470S	E.CAPACITOR 16V 47U	1	
C22609		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C22610		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C22612		ECQB1H102JZ	P.CAPACITOR 50V 1000P	1	
C22613		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
C23006		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
C23007		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23008		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23017		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C23018		ECEA1HK010	E.CAPACITOR CH 50V 1U	1	
C23201		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23202-04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C23206		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C23207-10		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C23213		ECUM1H240JCN	C.CAPACITOR CH 50V 24P	1	
C23214		ECUM1H820JCN	C.CAPACITOR CH 50V 32P	1	
C23215		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C23216		ECEA0JK221	E.CAPACITOR 50V 220U	1	
C23217		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C23219		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23225		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C23226		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23227		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C23231		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23235		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23240		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C23267		VCYD1C103MR1	S.CAPACITOR 16V 0.01U	1	
C23268		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C23271		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C23273		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C23274-76		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C23277		ECUM1H750JCN	C.CAPACITOR CH 50V 75P	1	
C23279		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C23280		ECUM1H430JCN	C.CAPACITOR CH 50V 43P	1	
C23282		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C23284		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C23285		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C23317,18		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C23319		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23320		VCYD1C103MR1	S.CAPACITOR 16V 0.01U	1	
C23321		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23322		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23323		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C23324		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23325		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23339,40		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C23341		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C23345		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C23350		ECEA0JU102	E.CAPACITOR 6.3V 1000U	1	
C23352		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23358		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C23366,67		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	2	
C23373		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C23374		ECEA0JU102	E.CAPACITOR 6.3V 1000U	1	
C23375		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C23376		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C23377		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	1	
C23378		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23379		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C23380		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C23381		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23382		ECUM1H050DCN	C.CAPACITOR CH 50V 50P	1	
C23383		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23384		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C23385		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C23386		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23387		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C24001-03		ECEA1CK330	E.CAPACITOR 16V 33U	3	
C24004		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C24005		ECQV1H224JZ	P.CAPACITOR 50V 0.22U	1	
C24006		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C24007		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C24008		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C24009		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C24010		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C24011		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C24012		ECQP1H681JZ	P.CAPACITOR 50V 680P	1	
C24013		ECQV1H474JZ	P.CAPACITOR 50V 0.47U	1	
C24014		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C24015		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C24016		ECQP1H681JZ	P.CAPACITOR 50V 680P	1	
C24017,18		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	2	
C24019		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C24020		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C24021		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C24022		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C24023		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C24026		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C24201		ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C24203,04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C24205		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C24206		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C24207,08		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	2	
C24211		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C24212		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C24213,14		ECEA0JK101	E.CAPACITOR 6.3V 100U	2	
C24215		ECUM1H331JN	C.CAPACITOR CH 50V 330P	1	
C24216		ECUM1H271JN	C.CAPACITOR CH 50V 270P	1	
C24219,20		ECUM1H822KBN	C.CAPACITOR CH 50V 8200P	2	
C24221,22		ECEA0JK220	E.CAPACITOR 6.3V 22U	2	
C24223,24		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	2	
C24225,26		ECQM1H472JV	P.CAPACITOR 50V 4700P	2	
C24229,30		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C24231		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C24232		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C24233		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C24235,36		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C24237,38		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C24239		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C24241		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C24242		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C24243		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C24244		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C24247,48		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	2	
C24250		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C24251,52		ECEA0JK221	E.CAPACITOR 6.3V 220U	2	
C24258		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
C24270		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C24274,75		ECEA1CKN220	E.CAPACITOR 16V 22U	2	
C24276		ECEA1EKN100	E.CAPACITOR 25V 10U	1	
C24281		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C24282		ECQB1H223JZ	P.CAPACITOR 50V 0.022U	1	
C24291,92		ECQM1H102JV	P.CAPACITOR 50V 1000P	2	
C24293		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C26201		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C26202		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C26203		ECUM1H151JN	C.CAPACITOR CH 50V 150P	1	
C26204		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C26205-07		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C26208,09		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C26401		ECEA1EU101	E.CAPACITOR 25V 100U	1	
C26402		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
			DIODES		
D23001,02		MA165	DIODE	2	
D23204-11		MA165	DIODE	8	
D23212		MA4036M	DIODE	1	
D24203-09		MA165	DIODE	7	
D26401		MA4082M	DIODE	1	
D26402		MA4075M	DIODE	1	
			ICS		
IC22601		AN6562	IC	1	
IC23201		AN2661NK	IC	1	
IC23205		MB88323A	IC	1	
IC23208		MN73534PXE	IC	1	
IC23209		MC14576AP	IC	1	
IC24001		UPD4053BC	IC	1	
IC24002		AN8371S	IC	1	
IC24003		MN6625	IC	1	
IC24015		LC3517BML15	IC	1	
IC24016		AN6552	IC	1	
IC24201		PA0034A	IC	1	
IC24206		TOTX174-A	IC	1	
IC24207		M5218AL	IC	1	
IC26201		MN1882410VUW	IC	1	
IC26202		M51953BL	IC	1	
IC26203		MN1280S	IC	1	
IC26401		BA6247N	IC	1	
			PLATE		
J23201		VEJ1011	TERMINAL PLATE	1	
			COILS		
L22601		VLQEL05F330K	COIL 33UH	1	
L22602		VLQEL05F5R6K	COIL 5.6UH	1	
L23002		VLQEL05F270K	COIL 27UH	1	
L23201		VLQEL05F330K	COIL 33UH	1	
L23215		VLQEL05F150J	COIL 15UH	1	
L23216		VLQEL05F100K	COIL 10UH	1	
L23217		VLQEL05F470K	COIL 47UH	1	
L23218		VLQEL05F330K	COIL 33UH	1	
L23220		VLQEL05F4R7J	COIL 4.7H	1	
L23221		ELESN200JA	COIL 20H	1	
L23222,23		ELESN300JA	COIL 30H	2	
L23224		VLQEL05F100J	COIL 10UH	1	
L23229,30		VLQEL05F390K	COIL 39UH	2	
L23237		VLQEL05F8R2K	COIL 8.2UH	1	
L23238		VLQEL07F123J	COIL 12mH	1	
L24002,03		VLQEL05F390K	COIL 39UH	2	
L24201		VLQEL05F101K	COIL 100UH	1	
L24202		VLQEL05F270K	COIL 27UH	1	
L24203-05		VLQEL05F100K	COIL 10UH	3	
L24207		VLQEL05F330K	COIL 33UH	1	
L24291		VLQEL05F100K	COIL 10UH	1	
L26201		VLQEL05F270K	COIL 27UH	1	
			FILTERS		
LC23001		VLF0680	FILTER	1	
LC23201		VLF0686	FILTER	1	
LC23202		VLF0687	FILTER	1	
LC23203		VLF0688	FILTER	1	
LC24201		VLF0830	FILTER	1	
			CONNECTORS		
P22601		VJP1247T	CONNECTOR(MALE) 7P	1	
P23201		VJP1148	CONNECTOR(MALE) 2P	1	
P23203		VJP1394T	CONNECTOR(MALE) 13P	1	
P23204		VJP1244T	CONNECTOR(MALE) 4P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
P23205	VJP1245T	CONNECTOR(MALE) 5P	1	
P23206	VJP1243T	CONNECTOR(MALE) 3P	1	
P23207	VJP1244T	CONNECTOR(MALE) 4P	1	
P23208	VJP1244R	CONNECTOR(MALE) 4P	1	
P24001	VJP1252T	CONNECTOR(MALE) 12P	1	
P24003	VJP1245T	CONNECTOR(MALE) 5P	1	
P24201	VJP1245T	CONNECTOR(MALE) 5P	1	
P24602	VJF0171	CONNECTOR 13P	1	
P26201	VJP1244T	CONNECTOR(MALE) 4P	1	
P26202	VJP1248T	CONNECTOR(MALE) 8P	1	
P26203	VJP1251T	CONNECTOR(MALE) 11P	1	
P26205	VJP1148	CONNECTOR(MALE) 2P	1	
P26210,11	VJP1250T	CONNECTOR(MALE) 10P	2	
P26401	VJP1148	CONNECTOR(MALE) 2P	1	
PJ24002	VJP1261	CONNECTOR(MALE) 3P	1	
		TRANSISTOR CHIPS		
Q22601	2SC2295	TRANSISTOR CHIP	1	(B,C)
Q22602	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q22603	2SK301	TRANSISTOR	1	
Q22606	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23006,07	2SD601	TRANSISTOR CHIP	2	(Q,R,S)
Q23010	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23013,14	2SB709	TRANSISTOR CHIP	2	(Q,R,S)
Q23201	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23202	2SC2295	TRANSISTOR CHIP	1	(B,C)
Q23203	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23204	2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23205,06	2SC2295	TRANSISTOR CHIP	2	(B,C)
Q23209	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23212	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23236	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23239	2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23241	2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23242-44	2SD601	TRANSISTOR CHIP	3	(Q,R,S)
Q23245	2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23246	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23247,48	2SB709	TRANSISTOR CHIP	2	(Q,R,S)
Q23249-51	2SD601	TRANSISTOR CHIP	3	(Q,R,S)
Q23252	2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q24001	2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q24201,02	2SD601	TRANSISTOR CHIP	2	(Q,R,S)
Q24209,10	2SD1757K	TRANSISTOR	2	
Q24215	2SD601	TRANSISTOR CHIP	1	(Q,R,S)
		COMBINATIONS		
QR22604	UN2212	TRANSISTOR-RESISTOR	1	
QR22605	UN2112	TRANSISTOR-RESISTOR	1	
QR22607	UN2212	TRANSISTOR-RESISTOR	1	
QR23201	UN2211	TRANSISTOR-RESISTOR	1	
QR23204	UN2111	TRANSISTOR-RESISTOR	1	
QR23205	UN2211	TRANSISTOR-RESISTOR	1	
QR23206	UN2113	TRANSISTOR-RESISTOR	1	
QR23207	UN2111	TRANSISTOR-RESISTOR	1	
QR24001	UN2111	TRANSISTOR-RESISTOR	1	
QR24002	UN2211	TRANSISTOR-RESISTOR	1	
QR24211	UN2111	TRANSISTOR-RESISTOR	1	
QR24212	UN2214	TRANSISTOR-RESISTOR	1	
QR24213	UN2211	TRANSISTOR-RESISTOR	1	
QR24214	UN2115	TRANSISTOR-RESISTOR	1	
QR24215	UN2111	TRANSISTOR-RESISTOR	1	
QR26202	UN2115	TRANSISTOR-RESISTOR	1	
QR26401	UN2212	TRANSISTOR-RESISTOR	1	
		RESISTORS		
R22601	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R22602	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R22603	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R22608	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R22609	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R22610	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R22612	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R22613,14	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R22617	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R22618	ERJ6GEYJ683	M.RESISTOR CH 1/10W 68K	1	
R22619	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R22620	ERJ6GEYJ824	M.RESISTOR CH 1/10W 820K	1	
R22621	ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	1	
R22622	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	1	
R22623	ERJ6GEYJ394	M.RESISTOR CH 1/10W 390K	1	
R22624	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R22625,26	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	2	
R22627	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R22628	ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	1	
R22629	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R22630	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R22631	ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R22632	ERJ6GEYJ823	M.RESISTOR CH 1/10W 82K	1	
R22633	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R23010	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23011	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23012	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23013	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23014	ERDS2TJ390	C.RESISTOR 1/4W 39	1	
R23015	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23024	ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23025	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23026	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23028	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23029	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23201	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R23202	ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R23203	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23204	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23205	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R23206	ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R23207	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R23208	ERJ6GEYJ512	M.RESISTOR CH 1/10W 5.1K	1	
R23209	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23210	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23211	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23212	ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R23213	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R23214	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23215	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R23216	ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R23220	ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23221	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23222	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23223	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R23224	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23239	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23279	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23281	ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R23282	ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23283,84	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R23317	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23318	ERJ6GEYJ271	M.RESISTOR CH 1/10W 270	1	
R23319	ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R23320	ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23321	ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R23322	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23341	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23342	ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R23346-50	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	5	
R23353	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R23354	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23355,56	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R23357	ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23361	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23366	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R23368	ERJ6GEYJ183	M.RESISTOR CH 1/10W 18K	1	
R23369	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R23403	ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R23404	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R23405	ERJ6GEYJ124	M.RESISTOR CH 1/10W 120K	1	
R23406	ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R23409		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R23410		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23411		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R23412		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23421		ERJ6GEYJ680	M.RESISTOR CH 1/10W 68	1	
R23431		ERDS2TJ680	C.RESISTOR 1/4W 68	1	
R23434		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23435		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R23436,37		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R23439		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23440		ERJ6GEYJ390	M.RESISTOR CH 1/10W 39	1	
R23441		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R23442		ERJ6GEYJ564	M.RESISTOR CH 1/10W 560K	1	
R23443		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23444		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R23445		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23446		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23447		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R23448,49		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R23450		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23451		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23452		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R23453,54		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R23455		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23456		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23457		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R23458		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23459		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23460		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R23461		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23462		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R23463		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23464		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23465		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23466		ERJ6GEYJ391	M.RESISTOR CH 1/10W 390	1	
R23467		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23468		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23469		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23470		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23471		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R23472		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23473		ERJ6GEYJ223	M.RESISTOR CH 1/10W 120	1	
R24001		ERJ6GEYJ121	M.RESISTOR CH 1/10W 120	1	
R24002		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R24003		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R24004		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R24005		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R24006		ERJ6GEYJ682	M.RESISTOR CH 1/10W 6.8K	1	
R24007		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R24008		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R24009		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R24010		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R24011		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R24012		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	1	
R24013		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
R24014		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R24015		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R24070,71		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R24201		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R24202		ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R24203		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R24204		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R24205		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R24206		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R24207		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R24208,09		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R24221,22		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R24223,24		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	2	
R24225,26		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	
R24227,28		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R24229,30		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	2	
R24231,32		ERJ6GEYJ754	M.RESISTOR CH 1/10W 750K	2	
R24233,34		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	2	
R24235,36		ERJ6GEYJ154	M.RESISTOR CH 1/10W 150K	2	
R24237		ERJ6GEYJ204	M.RESISTOR CH 1/10W 200K	1	
R24238		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R24240,41		ERDS2TJ331	C.RESISTOR 1/4W 330	2	
R24242		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R24242		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R24243		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R24243		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	1	
R24244,45		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	2	
R24246,47		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	2	
R24248		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	1	
R24258		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R24259		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R24266		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R24267		ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R24268		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R24286		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R24291-94		ERDS2TJ271	C.RESISTOR 1/4W 270	4	
R24305		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R24306,07		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R24308		ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	1	
R24309		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R26201		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R26203		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R26204		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R26206,07		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R26208		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R26209		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R26210		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R26212		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R26213-15		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	3	
R26216		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R26221		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R26401		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
			COMBINATIONS		
RX26203		EXBZ6E473J	RESISTOR-RESISTOR	1	
RX26205		EXBZ6E473J	RESISTOR-RESISTOR	1	
RX26211,12		EXBZ5E473J	RESISTOR-RESISTOR	2	
RX26217		EXBZ4E103J	RESISTOR-RESISTOR	1	
			RELAY		
RY24201		VSY2036	RELAY	1	
			RESISTORS		
VR23201		EVND4AA00B52	V.RESISTOR 500	1	
VR23208		EVND4AA00B13	V.RESISTOR 1K	1	
VR24001		EVND4AA00B24	V.RESISTOR 20K	1	
VR24002		EVND4AA00B14	V.RESISTOR 10K	1	
VR24003		EVN38CA00B13	V.RESISTOR 1K	1	
			OSCILLATOR		
X26201		EF0FC8004A4	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VMP2627	C.B.A. SUPPORT ANGLE	1	
		VJF0300	BIND	1	
	■	VEP92229A	SERVO C.B.A.		
			CAPACITORS		
C22001		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C22002		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C22003		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C22004,05		VCYD1C223MR1	S.CAPACITOR 16V 0.022U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C22051		ECQV1H124JZ	P.CAPACITOR 50V 0.12U	1	
C22052		ECQB1H392JH	P.CAPACITOR 50V 3900P	1	
C22053		ECEA1HK4R7	E.CAPACITOR 50V 4.7U	1	
C22054		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C22055		ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C22056		ECQB1H681JH	P.CAPACITOR 50V 680P	1	
C22057		ECEA0JKN220	E.CAPACITOR 6.3V 22U	1	
C22058		ECEA0JK220	E.CAPACITOR 6.3V 22U	1	
C22059		ECQB1H222KH	P.CAPACITOR 50V 2200P	1	
C22060		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C22061		ECEA1EKN3R3	E.CAPACITOR 25V 3.3U	1	
C22062		ECEA1HKNR22	E.CAPACITOR 50V 0.22U	1	
C22063,64		ECEA1CK470	E.CAPACITOR 16V 47U	2	
C22065		ECCF1H271J	C.CAPACITOR 50V 270P	1	
C22066		ECEA1HKNR22	E.CAPACITOR 50V 0.22U	1	
C22067		ECQB1H681JH	P.CAPACITOR 50V 680P	1	
C22068		ECQB1H472JH	P.CAPACITOR 50V 4700P	1	
C22069		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C22071		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C22072		ECQB1H471JH	P.CAPACITOR 50V 470P	1	
C22073		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C22074		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C22075		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C22076		ECCF1H181J	C.CAPACITOR 50V 180P	1	
C22077,78		ECQB1H472JH	P.CAPACITOR 50V 4700P	2	
C22079		ECQB1H123JH	P.CAPACITOR 50V 0.012U	1	
C22080-83		ECEA0JK470	E.CAPACITOR 6.3V 47U	4	
C22084		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C22085		ECCF1H151J	C.CAPACITOR 50V 150P	1	
C22086		ECQB1H471JH	P.CAPACITOR 50V 470P	1	
C22087		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C22088		ECCF1H271J	C.CAPACITOR 50V 270P	1	
C22089		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C22090,91		VCYD1C223MR1	S.CAPACITOR 16V 0.022U	2	
C22092		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C22201		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C22202		ECEA1HKN2R2	E.CAPACITOR 50V 2.2U	1	
C22203		ECQB1H333JH	P.CAPACITOR 50V 0.033U	1	
C22204		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C22205,06		ECEA1CK470	E.CAPACITOR 16V 47U	2	
C22301,02		ECQV1H823JZ	P.CAPACITOR 50V 0.082U	2	
C22303-05		ECEA0JK470	E.CAPACITOR 6.3V 47U	3	
C22306,07		ECQB1H103JH	P.CAPACITOR 50V 0.01U	2	
C22308		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C22309		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C22401		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C22402		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C22403,04		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C22405		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C22406,07		ECEA1CK470	E.CAPACITOR 16V 47U	2	
			DIODES		
D22051		MA165	DIODE	1	
D22052,53		MA4030M	DIODE	2	
D22054,55		MA29W	DIODE	2	
D22056,57		MA27	DIODE	2	
D22058		MA165	DIODE	1	
D22201,02		MA4030M	DIODE	2	
D22203-05		MA165	DIODE	3	
D22301-09		MA165	DIODE	9	
D22401-07		MA165	DIODE	7	
D22408		MA723	DIODE	1	
D22409,10		MA4062M	DIODE	2	
			ICS		
IC22051		AN2870	IC	1	
IC22052		MN4053BS	IC	1	
IC22053		MN4052BS	IC	1	
IC22054		M5218L	IC	1	
IC22201		M5201L	IC	1	
IC22202		LA6500	IC	1	
IC22301		UPC4072HA	IC	1	
IC22302-04		M5218L	IC	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
IC22305		TCA0372DP1	IC	1	
IC22306		MN4052BS	IC	1	
IC22401		M5201L	IC	1	
			COIL		
L22001-03		VLQEL05F270K	COIL 27UH	3	
			CONNECTORS		
P22002		VJP1229T	CONNECTOR(MALE) 2P	1	
P22003		VJP1143	CONNECTOR(MALE) 5P	1	
P22004		VJP1511T	CONNECTOR(MALE) 11P	1	
P22005		VJP1232T	CONNECTOR(MALE) 5P	1	
P22006		VJP1237T	CONNECTOR(MALE) 10P	1	
P22007		VJP1229T	CONNECTOR(MALE) 2P	1	
P22008		VJP1229R	CONNECTOR(MALE) 2P	1	
P22009		VJP1233T	CONNECTOR(MALE) 6P	1	
P22010		VJP1229T	CONNECTOR(MALE) 2P	1	
P22011		VJP1230T	CONNECTOR(MALE) 3P	1	
P22012		VJP1231T	CONNECTOR(MALE) 4P	1	
PF22001		VJS2889A027	CONNECTOR (FEMALE) 27P	1	
			TRANSISTORS		
Q22001		2SC1740SX	TRANSISTOR	1	
Q22051		2SA1309	TRANSISTOR	1	
Q22052		2SD2012	TRANSISTOR	1	
Q22053,54		2SB1375	TRANSISTOR	2	
Q22055		2SD2012	TRANSISTOR	1	
Q22056		2SK330	TRANSISTOR	1	
Q22057.		2SJ164R	TRANSISTOR	1	
Q22301		2SK330	TRANSISTOR	1	
Q22302		2SC3311	TRANSISTOR	1	
			COMBINATIONS		
QR22101		DTA124TSX	TRANSISTOR-RESISTOR	1	
QR22102		DTA144ESX	TRANSISTOR-RESISTOR	1	
QR22103		DTC124TSX	TRANSISTOR-RESISTOR	1	
QR22104		DTA144ESX	TRANSISTOR-RESISTOR	1	
QR22105		DTC144ESX	TRANSISTOR-RESISTOR	1	
QR22106		DTC124TSX	TRANSISTOR-RESISTOR	1	
QR22201		DTC124ESX	TRANSISTOR-RESISTOR	1	
QR22311		DTA124ESX	TRANSISTOR-RESISTOR	1	
QR22401		DTC124ESX	TRANSISTOR-RESISTOR	1	
QR22501		DTC124ESX	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R22001		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R22002		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R22003		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R22004		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R22005		ERDS2TJ390	C.RESISTOR 1/4W 39	1	
R22051		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R22052,53		ERDS2TJ120	C.RESISTOR 1/4W 12	2	
R22054		ERDS1FJ3R3	C.RESISTOR 1/2W 3.3	1	
R22055		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R22056		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R22057		ERDS1FJ3R3	C.RESISTOR 1/2W 3.3	1	
R22058		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R22059		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R22060,61		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22062-69		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	8	
R22070,71		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	2	
R22072,73		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	2	
R22074		EROS2CKG8200	M.RESISTOR 1/4W 820	1	
R22075		EROS2CKG1202	M.RESISTOR 1/4W 12K	1	
R22076		EROS2CKG1001	M.RESISTOR 1/4W 1K	1	
R22077		EROS2CKG2702	M.RESISTOR 1/4W 27K	1	
R22078		EROS2CKG5602	M.RESISTOR 1/4W 56K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R22079		EROS2CKG4701	M.RESISTOR 1/4W 4.7K	1	
R22080		EROS2CKG8201	M.RESISTOR 1/4W 8.2K	1	
R22081		EROS2CKG3302	M.RESISTOR 1/4W 33K	1	
R22082,83		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	2	
R22084		EROS2CKG2702	M.RESISTOR 1/4W 27K	1	
R22085		EROS2CKG2201	M.RESISTOR 1/4W 2.2K	1	
R22086		EROS2CKG5601	M.RESISTOR 1/4W 5.6K	1	
R22087		EROS2CKG3902	M.RESISTOR 1/4W 39K	1	
R22088-91		EROS2CKG1002	M.RESISTOR 1/4W 10K	4	
R22092		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R22093,94		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22095		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22096,97		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R22098		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R22099		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22100		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R22101		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R22102		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R22103		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22104		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R22106		EROS2CKG2702	M.RESISTOR 1/4W 27K	1	
R22107,08		ERDS2TJ561	C.RESISTOR 1/4W 560	2	
R22109		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R22110-13		ERDS2TJ102	C.RESISTOR 1/4W 1K	4	
R22114-17		ERDS2TJ561	C.RESISTOR 1/4W 560	4	
R22118,19		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R22120		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
R22121		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R22122		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22123		ERDS2TJ105	C.RESISTOR 1/4W 1M	1	
R22201,02		ERDS2TJ563	C.RESISTOR 1/4W 56K	2	
R22203,04		ERDS2TJ124	C.RESISTOR 1/4W 120K	2	
R22205		ERDS2TJ273	C.RESISTOR 1/4W 27K	1	
R22206		ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R22207		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22208		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R22209		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R22210		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R22211		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R22212		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22213		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R22214,15		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22216		ERDS2TJ123	C.RESISTOR 1/4W 12K	1	
R22217		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R22218		ERDS2TJ2R2	C.RESISTOR 1/4W 2.2	1	
R22219		ERDS1FJ3R3	C.RESISTOR 1/2W 3.3	1	
R22220		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22301,02		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R22303,04		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	2	
R22305,06		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22307,08		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	2	
R22309,10		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R22311,12		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22313,14		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R22315		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22316		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22317		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R22318		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22319		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R22320		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R22321,22		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22323		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R22324		ERDS2TJ121	C.RESISTOR 1/4W 120	1	
R22325		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22326		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R22327		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22328		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22329		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22330		ERDS2TJ564	C.RESISTOR 1/4W 560K	1	
R22331		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R22332		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22333		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R22334		ERDS2TJ681	C.RESISTOR 1/4W 680	1	
R22335		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22336		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R22337		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R22338		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R22339		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R22340		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R22341,42		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R22343,44		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22345		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R22346		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R22347		ERDS2TJ150	C.RESISTOR 1/4W 15	1	
R22401		ERDS2TJ272	C.RESISTOR 1/4W 2.7K	1	
R22402		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R22403		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R22404,05		ERDS2TJ333	C.RESISTOR 1/4W 33K	2	
R22406		ERDS2TJ393	C.RESISTOR 1/4W 39K	1	
R22407		ERDS2TJ333	C.RESISTOR 1/4W 33K	1	
R22408-10		ERDS2TJ473	C.RESISTOR 1/4W 47K	3	
R22411		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R22412		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R22413		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R22414,15		ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R22416		ERDS1FJ3R3	C.RESISTOR 1/2W 3.3	1	
R22417		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R22501		ERDS2TJ682	C.RESISTOR 1/4W 6.8K	1	
R22502		ERDS2TJ181	C.RESISTOR 1/4W 180	1	
			RESISTORS		
VR22051,52		EVND4AA00B14	V.RESISTOR 10K	2	
VR22053-55		EVND4AA00B23	V.RESISTOR 2K	3	
VR22056		EVND4AA00B53	V.RESISTOR 5K	1	
VR22057		EVND4AA00B14	V.RESISTOR 10K	1	
VR22058,59		EVND4AA00B13	V.RESISTOR 1K	2	
VR22060-63		EVND4AA00B14	V.RESISTOR 10K	4	
VR22301,02		EVMMAGA01B14	V.RESISTOR 10K	2	
			MISCELLANEOUS		
		VKC0118	HINGE	2	
	■	VEP93104B	DIGITAL C.B.A.		
			FILTERS		
B23701-29		VLP0111	AUDIO B.P.F.	29	
			CAPACITORS		
C23701,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C23703		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C23704		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23705		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23706		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C23707		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C23708		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C23709		ECUM1H030DCN	C.CAPACITOR CH 50V 3P	1	
C23710		ECUM1H683ZFN	C.CAPACITOR CH 50V 0.068U	1	
C23711		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23712		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23713,14		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C23715		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C23716		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23717		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C23718		ECUM1H271KBN	C.CAPACITOR CH 50V 270P	1	
C23719		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23720		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23721		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C23722		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23723		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C23724		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C23725		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C23726-28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C23729		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23730		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23732,33		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C23734,35		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C23736		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C23737,38		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C23739		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23740		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C23741		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23742		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C23743		ECUM1H050DCN	C.CAPACITOR CH 50V 50P	1	
C23744		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23745,46		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C23747		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23748		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
C23749		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23750		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23751		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C23752		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C23753		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C23754		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C23755		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C23756		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23757,58		ECEA0JK470	E.CAPACITOR 6.3V 47U	2	
C23759,60		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C23761		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23762-66		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C23767		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23768		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23770		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23771		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C23772		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23773		ECUM1H030DCN	C.CAPACITOR CH 50V 3P	1	
C23774		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23775		ECUM1H030DCN	C.CAPACITOR CH 50V 3P	1	
C23776		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23777		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C23778		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23780		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23781		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23782,83		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C23784		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23785		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23786		ECUM1H821KBN	C.CAPACITOR CH 50V 820P	1	
C23787		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C23788		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C23789		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23790		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C23791		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23791		VCYD1C103MR1	S.CAPACITOR 16V 0.01U	1	
C23792		ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C23793		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C23794		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C23795		ECUM1H223ZFN	C.CAPACITOR CH 50V 0.022U	1	
C23796		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C23797		ECUM1H561KBN	C.CAPACITOR CH 50V 560P	1	
C23798		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23799		ECEA0JU471	E.CAPACITOR 6.3V 470U	1	
C23801		ECUM1H181KBN	C.CAPACITOR CH 50V 180P	1	
C23802		ECEA1AKN470	E.CAPACITOR 10V 47U	1	
C23803		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23804		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23805		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C23806		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23807		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23808		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C23809		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C23811		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23812		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C23813		ECEA0JK221	E.CAPACITOR 6.3V 220U	1	
C23814		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C23818,19		ECEA1AKS470	E.CAPACITOR 10V 47U	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C23820		ECEA0JU471	E.CAPACITOR 6.3V 470U	1	
C23828		ECUM1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C23832		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23833		ECUM1H101KBN	C.CAPACITOR CH 50V 100P	1	
C23834		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C23835,36		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C23837		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C23838		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C23839		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23840		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C23841,42		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C23843		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23844		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23845		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23846,47		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C23848		ECUM1H101KBN	C.CAPACITOR CH 50V 100P	1	
C23849		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23850		ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C23851		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23852-57		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	6	
C23858		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23859		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23860,61		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	2	
C23862		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C23863		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C23864,65		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
			TRIMMERS		
CT23701		ECRHA020D41	TRIMMER	1	
CT23702		ECRHA030D41	TRIMMER	1	
			DIODES		
D23701		MA3062M	DIODE	1	
D23702-04		MA157	DIODE	3	
D23708		MA151A	DIODE	1	
D23709		MA3082	DIODE	1	
			RESISTORS		
FB23701,02		ERDS2T0	C.RESISTOR 1/4W 0	2	
FB23703,04		ELXTS470GA	FILTER	2	
FB23705		ERDS2T0	C.RESISTOR 1/4W 0	1	
FB23706		ELXTS470GA	FILTER	1	
FB23707		ERDS2T0	C.RESISTOR 1/4W 0	1	
			FILTERS		
FL23701-03		VLF0877	FILTER	3	
			ICS		
IC23701		MC14576AP	IC	1	
IC23702		MB40578P	IC	1	
IC23703		MN8810	IC	1	
IC23704		MN53080PXF	IC	1	
IC23705,06		MN4700F	IC	2	
IC23707		MN53060PXG	IC	1	
IC23708		MN4760S	IC	1	
IC23709,10		MB40778PF	IC	2	
IC23711,12		MC14576AP	IC	2	
IC23713		LVA519S	IC	1	
IC23714		MN4094BS	IC	1	
IC23715		MN74HC74S	IC	1	
IC23716		MC14576AP	IC	1	
IC23717		AN78M05	IC	1	
			RESISTORS		
J23702		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
J23704-06		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
J23709-14		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	6	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			COILS		
L23701		VLQEL05S330K	COIL 33UH	1	
L23702,03		VLQEL05S270J	COIL 27UH	2	
L23704		VLQEL05S330K	COIL 33UH	1	
L23705		VLQEL05F100K	COIL 10UH	1	
L23707		VLQEL05S2R2J	COIL 2.2UH	1	
L23708		VLQEL05S100J	COIL 10UH	1	
L23709,10		VLQEL05F100K	COIL 10UH	2	
L23711		VLQEL05F470K	COIL 47UH	1	
L23712		VLQEL05F100K	COIL 10UH	1	
L23713,14		VLQEL05S390J	COIL 39UH	2	
L23715,16		VLQEL05S470J	COIL 47UH	2	
L23717		VLQEL05S330K	COIL 33UH	1	
L23718		VLQEL05S330J	COIL 33UH	1	
L23719		VLQEL05S330K	COIL 33UH	1	
L23720		VLQEL05S180K	COIL 18UH	1	
			CONNECTORS		
P23208		VJR1231R	CONNECTOR 4P	1	
P23208		VJS1231R	CONNECTOR(FEMALE) 4P	1	
P23701		VJP1394T	CONNECTOR(MALE) 13P	1	
P23702		VJP1244T	CONNECTOR(MALE) 4P	1	
P23703		VJP1243T	CONNECTOR(MALE) 3P	1	
P23704		VJP1250T	CONNECTOR(MALE) 10P	1	
P23705		VJP1244T	CONNECTOR(MALE) 4P	1	
P23706		VJP1244R	CONNECTOR(MALE) 4P	1	
P23707		VJP1245T	CONNECTOR(MALE) 5P	1	
			CONNECTOR		
PJ23708		VJP1255	CONNECTOR(MALE) 4P	1	
			TRANSISTOR CHIPS		
Q23701-03		2SD601	TRANSISTOR CHIP	3	(Q,R,S)
Q23704		2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23705		2SK198	TRANSISTOR CHIP	1	
Q23706,07		2SB709	TRANSISTOR CHIP	2	(Q,R,S)
Q23708-23		2SD601	TRANSISTOR CHIP	16	(Q,R,S)
Q23724		2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23725		2SD601	TRANSISTOR CHIP	1	(Q,R,S)
Q23727,28		2SD601	TRANSISTOR CHIP	2	(Q,R,S)
Q23731-33		2SD601	TRANSISTOR CHIP	3	(Q,R,S)
Q23743-45		2SD601	TRANSISTOR CHIP	3	(Q,R,S)
Q23746		2SB709	TRANSISTOR CHIP	1	(Q,R,S)
Q23747		2SA1022	TRANSISTOR	1	
			COMBINATIONS		
QR23701		UN2112	TRANSISTOR-RESISTOR	1	
QR23703		UN2212	TRANSISTOR-RESISTOR	1	
QR23717		UN2212	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R23701-03		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	3	
R23704		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R23705,06		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R23707		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	1	
R23708		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R23709		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23710		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23711		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23712,13		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	2	
R23714		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23715,16		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	2	
R23718		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23719		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23720		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R23721,22		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R23723		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23724		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23725		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23726,27		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R23728		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R23729		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R23730		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23731		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R23732		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23733		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23734		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	1	
R23735		ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R23736		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23737		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23738		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23739		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23740		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23741		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23742		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23743		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23744		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23745		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23746		ERDS2TJ822	C.RESISTOR 1/4W 8.2K	1	
R23747		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23748		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23749		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R23750		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23751		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23752		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R23753		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23754		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23755		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23756		ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23757		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23758		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R23759		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23760		ERJ6GEYJ680	M.RESISTOR CH 1/10W 68	1	
R23761		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23762		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R23763		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23764		ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1	
R23765		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23766		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23767,68		ERJ6GEYJ392	M.RESISTOR CH 1/10W 3.9K	2	
R23769		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23770		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23771		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23772		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23773		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	1	
R23774		ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R23775		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23776		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	1	
R23777,78		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R23779		ERJ6GEYJ680	M.RESISTOR CH 1/10W 68	1	
R23780		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23781		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R23782		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R23783		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23784		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R23785		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23786		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23787		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R23788		ERJ6GEYJ152	M.RESISTOR CH 1/10W 1.5K	1	
R23789		ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23790		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23791		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23792		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R23793		ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23795		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23796		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23797		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	
R23798		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23799		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R23800		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23801		ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	1	
R23802		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23804		ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23805		ERJ6GEYJ101	M.RESISTOR CH 1/10W 100	1	
R23806		ERJ6GEYJ182	M.RESISTOR CH 1/10W 1.8K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R23807	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23809	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23810	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	1	
R23811	ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	1	
R23812	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	1	
R23820	ERJ6GEYJ821	M.RESISTOR CH 1/10W 820	1	
R23821	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23822,23	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	2	
R23824	ERJ6GEYJ151	M.RESISTOR CH 1/10W 150	1	
R23825	ERJ6GEYJ561	M.RESISTOR CH 1/10W 560	1	
R23846,47	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R23850	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23851	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23852-54	ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	3	
R23856	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R23857	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R23858	ERJ6GEYJ222	M.RESISTOR CH 1/10W 2.2K	1	
R23859	ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	1	
R23860	ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	1	
R23861	ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	1	
R23862-74	ERJ6GEYJ221	M.RESISTOR CH 1/10W 220	13	
R23875	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
		RESISTORS		
VR23702,03	EVN3ACA00B13	V.RESISTOR 1K	2	
		OSCILLATOR		
X23701	VSX0405-A	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VSC3147	SHIELD (MAIN)	1	
	VSC3148	SHIELD (TOP)	1	
	VSC3149	SHIELD (BOTTOM)	1	
	■ VEP94075B	MASH C.B.A.		
		FILTERS		
B24601-12	VLP0111	AUDIO B.P.F	12	
B24614-22	VLP0111	AUDIO B.P.F	9	
		CAPACITORS		
C24601,02	ECA1APXS470	E.CAPACITOR 10V 47U	2	
C24603	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C24604	ECUM1H270KCN	C.CAPACITOR CH 50V 27P	1	
C24605	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C24606	ECUM1H272KBN	C.CAPACITOR CH 50V 2700P	1	
C24607	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C24608	ECUM1H470KCN	C.CAPACITOR CH 50V 47P	1	
C24609	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C24610	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C24612	ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C24613	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C24615	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C24616	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C24617	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C24618	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C24619	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C24620	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C24621	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C24622	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C24623,24	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	2	
C24626,27	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C24629,30	ECA1APXS470	E.CAPACITOR 10V 47U	2	
C24631,32	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C24633,34	ECQV1H105JZ	P.CAPACITOR 50V 1U	2	
C24635-42	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
C24643,44	VCEA1CAM470	E.CAPACITOR 16V 47U	2	
C24645,46	ECQP1H392JZ	P.CAPACITOR 50V 3900P	2	
C24647,48	ECUM1H151KBN	C.CAPACITOR CH 50V 150P	2	
C24649,50	ECQP1H392JZ	P.CAPACITOR 50V 3900P	2	
C24651,52	ECQP1H101JZ	P.CAPACITOR 50V 100P	2	
C24653-56	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C24657	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C24658,59	VCEA1CAM470	E.CAPACITOR 16V 47U	2	
C24660,61	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C24662	VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C24663-79	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	17	
		DIODES		
D24601	MA325B	DIODE	1	
D24602,03	MA165	DIODE	2	
		ICS		
IC24601	MN6472	IC	1	
IC24602,03	AN78L05	IC	2	
IC24604	MN74HC86S	IC	1	
IC24605	AN78N08	IC	1	
IC24606	AN79N08	IC	1	
IC24607-12	M5219FP	IC	6	
IC24613	AN78L05	IC	1	
IC24614,15	M5219FP	IC	2	
		COILS		
L24601	ELESN4R7KA	COIL 4.7UH	1	
L24602	EIV7EN129Q		1	
L24603	EIV7EN128Q		1	
L24606-09	ELESN101KA	COIL 100UH	4	
L24610	ELESN2R2MA	COIL 2.2UH	1	
		CONNECTORS		
P24601	VJP1245T	CONNECTOR(MALE) 5P	1	
P24602	VJP1394T	CONNECTOR(MALE) 13P	1	
P24603	VJP1243T	CONNECTOR(MALE) 3P	1	
P24604	VJP1242T	CONNECTOR(MALE) 2P	1	
		TRANSISTORS		
Q24601,02	2SK330	TRANSISTOR	2	
Q24603	2SB644	TRANSISTOR	1	
Q24604	2SD639	TRANSISTOR	1	
		COMBINATIONS		
QR24601	UN2112	TRANSISTOR-RESISTOR	1	
QR24602	UN2217	TRANSISTOR-RESISTOR	1	
QR24603	UN2212	TRANSISTOR-RESISTOR	1	
QR24606	UN2112	TRANSISTOR-RESISTOR	1	
QR24607	UN4116	TRANSISTOR-RESISTOR	1	
QR24608	UN2212	TRANSISTOR-RESISTOR	1	
		RESISTORS		
R24601	ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R24602	ERJ6GEYJ822	M.RESISTOR CH 1/10W 8.2K	1	
R24603	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R24604	ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R24605	ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	1	
R24606	ERJ6GEYJ333	M.RESISTOR CH 1/10W 33K	1	
R24607,08	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R24609,10	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R24611,12	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R24613,14	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R24615,16	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R24617,18	ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R24619,20	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R24621,22		ERJ6GEYJ393	M.RESISTOR CH 1/10W 39K	2	
R24623-26		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R24627,28		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R24629,30		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R24631-34		ERJ6GEYJ472	M.RESISTOR CH 1/10W 4.7K	4	
R24635,36		ERJ6GEYJ272	M.RESISTOR CH 1/10W 2.7K	2	
R24637,38		ERJ6GEYJ562	M.RESISTOR CH 1/10W 5.6K	2	
R24639,40		ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	2	
R24641,42		ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	2	
R24643,44		ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	2	
R24645,46		ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R24647,48		ERJ6GEYG393	M.RESISTOR CH 1/10W 39K	2	
R24649,50		ERJ6GEYJ474	M.RESISTOR CH 1/10W 470K	2	
R24651,52		ERJ6GEYJ473	M.RESISTOR CH 1/10W 2.2	2	
R24653		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R24654		ERJ6GEYK2R2	M.RESISTOR CH 1/10W 2.2	1	
R24655,56		ERJ6GEYJ220	M.RESISTOR CH 1/10W 22	2	
R24657,58		ERJ6GEYJ105	M.RESISTOR CH 1/10W 1M	2	
R24659,60		ERJ6GEYJ104	M.RESISTOR CH 1/10W 100K	2	
R24662,63		ERJ6GEYJ330	M.RESISTOR CH 1/10W 33	2	
R24664,65		ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2	
R24666,67		ERJ6GEYJ332	M.RESISTOR CH 1/10W 3.3K	2	
R24668,69		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R24670		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	1	
R24671-74		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	4	
R24675		ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
			OSCILLATOR		
X24601		VSX0278	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VSC3274	MASH SHIELD COVER	1	
		VSC3276	MASH CASE	1	
		VSC3277	CASE COVER (A)	1	
		VSC3278	CASE COVER (B)	1	
	■	VEP96172A	OPERATION C.B.A.		
			CONNECTOR		
P26011		VJS2949B010	CONNECTOR(FEMALE) 6P	1	
			SWITCHES		
S26001-22		EVQQFR02K	SWITCH	22	
	■	VEP96171A	FL C.B.A.		
			CONNECTORS		
BP26001,02		VJP1257	CONNECTOR(MALE)	2	
BP26003		VJP1255	CONNECTOR(MALE) 4P	1	
BP26004		VJP1259	CONNECTOR(MALE)	1	
			CAPACITORS		
C26001		ECEA1HKS100	E.CAPACITOR 50V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C26002		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C26003		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
C26004		ECEA1CKS470	E.CAPACITOR 16V 47U	1	
C26005		VCYR1C103MR1	S.CAPACITOR 16V 0.01U	1	
C26006		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	1	
			DIODES		
D26001-04		MA165	DIODE	4	
			FILTER		
FL26001		VSL0215	FILTER	1	
			IC		
IC26001		MN187204VUY	IC	1	
			CONNECTORS		
P21002		VJS1233T	CONNECTOR(FEMALE) 5P	1	
P23204		VJS1231T	CONNECTOR(FEMALE) 4P	1	
P26005,06		VJS2949B010W	CONNECTOR(FEMALE) 10P	2	
P26007		VJS1233T	CONNECTOR(FEMALE) 5P	1	
P26010		VJS2949B010W	CONNECTOR(FEMALE) 10P	1	
P26202		VJS1235T	CONNECTOR(FEMALE) 8P	1	
			RESISTORS		
R26001-06		ERDS2TJ103	C.RESISTOR 1/4W 10K	6	
R26007-14		ERDS2TJ473	C.RESISTOR 1/4W 47K	8	
R26015		ERDS2TJ331	C.RESISTOR 1/4W 330	1	
R26016-27		ERDS2TJ102	C.RESISTOR 1/4W 1K	12	
	■	VEP91055A	POWER SUPPLY & SPINDLE C.B.A.		
			CAPACITORS		
C21001,02		ECA1EPXS222S	E.CAPACITOR 25V 2200U	2	
C21003		ECEA1CU332	E.CAPACITOR 16V 3300U	1	
C21004		ECEA1CU471	E.CAPACITOR 16V 470U	1	
C21005-08		ECEA1CU222	E.CAPACITOR 16V 2200U	4	
C21009,10		ECEA1HU102	E.CAPACITOR 50V 1000U	2	
C21011,12		ECEA1CK470	E.CAPACITOR 16V 47U	2	
C21014		ECA1EPXS221	E.CAPACITOR 25V 220U	1	
C21015,16		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C21018		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C21019,20		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C21022		ECEA1CU221	E.CAPACITOR 16V 220U	1	
C21025		ECEA1AK470	E.CAPACITOR 10V 47U	1	
C21026,27		ECEA1VU101	E.CAPACITOR 35V 100U	2	
C21028		ECEA1EU101	E.CAPACITOR 25V 100U	1	
C21029		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C21030-32		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	3	
C21034		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C21038		ECEA1CU471	E.CAPACITOR 16V 470U	1	
C21039		ECEA1CU331	E.CAPACITOR 16V 330U	1	
C21040		ECEA1EU221	E.CAPACITOR 25V 220U	1	
C21041		ECQV1H564JZ	P.CAPACITOR 50V 0.56U	1	
C21049		ECQB1H682JZ	P.CAPACITOR 50V 6800P	1	
C22701		ECQB1H472JZ	P.CAPACITOR 50V 4700P	1	
C22702		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C22703		ECEA1HU470	E.CAPACITOR 50V 47U	1	
C22704		ECQB1H682KZ	P.CAPACITOR 50V 6800P	1	
C22705		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C22706		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C22707		ECQB1H223KZ	P.CAPACITOR 50V 0.022U	1	
C22708		ECA1VFZ220	E.CAPACITOR 35V 22U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C22709-11		ECQB1H333KZ	P.CAPACITOR 50V 0.033U	3	
C22712		ECQV1H104JZ	P.CAPACITOR 50V 0.1U	1	
C22713-15		ECEA1HN100S	E.CAPACITOR 50V 10U	3	
C22716		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C22717		ECQV1H154JZ	P.CAPACITOR 50V 0.15U	1	
C22718,19		ECEA1AU470	E.CAPACITOR 10V 47U	2	
C22720		ECQB1H272JZ	P.CAPACITOR 50V 2700P	1	
C22721		ECQB1H102JZ	P.CAPACITOR 50V 1000P	1	
C22723		ECQB1H103JZ	P.CAPACITOR 50V 0.01U	1	
			DIODES		
D21001		S1WB10	DIODE	1	
D21002		S2VB10	DIODE	1	
D21003		S1WB10	DIODE	1	
D21004		S2VB10	DIODE	1	
D21005-07		MA165	DIODE	3	
D21008		MA4220L	DIODE	1	
D21009		MA4051H	DIODE	1	
D22701		RL2ZP	DIODE	1	
D22702-04		MA165	DIODE	3	
D22705-10		1SR35200A	DIODE	6	
D22711-16		MA165	DIODE	6	
			ICS		
IC21004		AN78N12	IC	1	
IC21006		SI3050C	IC	1	
IC22701		AN3890FBS	IC	1	
IC22702		AN6915	IC	1	
IC22703		M5201L	IC	1	
			COIL		
L22701		ELC15E008	COIL	1	
			CONNECTORS		
P21001		VJP1146	CONNECTOR(MALE) 10P	1	
P21002		VJP1233T	CONNECTOR(MALE) 6P	1	
P21003		VJP1239T	CONNECTOR(MALE) 12P	1	
P21003		VJS1239T	CONNECTOR(FEMALE) 12P	1	
P21004		VJP1232T	CONNECTOR(MALE) 5P	1	
P21004		VJS1232T	CONNECTOR(FEMALE) 5P	1	
P21005		VJP1932T	CONNECTOR(MALE) 15P	1	
P21005,06		VJS1932T	CONNECTOR(FEMALE) 15P	2	
P21007		VJP1229T	CONNECTOR(MALE) 2P	1	
P21007		VJS1229T	CONNECTOR(FEMALE) 2P	1	
P21008		VJP1229T	CONNECTOR(MALE) 2P	1	
P21008		VJS1229T	CONNECTOR(FEMALE) 2P	1	
P21009		VJS1141	CONNECTOR(FEMALE) 2P	1	
P21013		VJP1229T	CONNECTOR(MALE) 2P	1	
P21014		VJP1231T	CONNECTOR(MALE) 4P	1	
P21015		VJS1229T	CONNECTOR(FEMALE) 2P	1	
P21016		VJP1229T	CONNECTOR(MALE) 2P	1	
P21016		VJS1229T	CONNECTOR(FEMALE) 2P	1	
P22005		VJS1232T	CONNECTOR(FEMALE) 5P	1	
P22010		VJS1229T	CONNECTOR(FEMALE) 2P	1	
P22601		VJS1234T	CONNECTOR(FEMALE) 7P	1	
P22701		VJP1234T	CONNECTOR(MALE) 7P	1	
P22701		VJS1234T	CONNECTOR(FEMALE) 7P	1	
P22702		VJP1511T	CONNECTOR(MALE) 3P	1	
P22703		VJP1230T	CONNECTOR(MALE) 3P	1	
P24001		VJS1239T	CONNECTOR(FEMALE) 12P	1	
			TRANSISTORS		
Q21002		2SA886V	TRANSISTOR	1	
Q21003		2SC3311	TRANSISTOR	1	
Q21004		2SA1309	TRANSISTOR	1	
Q21007		2SA886V	TRANSISTOR	1	
Q21008		2SC3311	TRANSISTOR	1	
Q21009		2SA1309	TRANSISTOR	1	
Q21011		2SA886V	TRANSISTOR	1	
Q21012		2SA684	TRANSISTOR	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q21013		2SC3311	TRANSISTOR	1	
Q21014		2SA1309	TRANSISTOR	1	
Q21015		2SA1198S	TRANSISTOR	1	
Q21018		2SB644	TRANSISTOR	1	
Q22703		2SA1567	TRANSISTOR	1	
Q22704		2SC1847	TRANSISTOR	1	
Q22705		2SD1450	TRANSISTOR	1	
Q22706,07		2SA1309	TRANSISTOR	2	
Q22708-11		2SC3311	TRANSISTOR	4	
Q22712		2SA684	TRANSISTOR	1	
Q22717-22		2SC3311	TRANSISTOR	6	
Q22723-28		2SA1309	TRANSISTOR	6	
Q22729		2SC3311	TRANSISTOR	1	
Q22731,32		2SC3311	TRANSISTOR	2	
Q22735-37		2SC3851	TRANSISTOR	3	
Q22738-40		2SA1488	TRANSISTOR	3	
			COMBINATIONS		
QR21024		UN1213	TRANSISTOR-RESISTOR	1	
QR22713		DTC124ESX	TRANSISTOR-RESISTOR	1	
QR22715,16		DTC124ESX	TRANSISTOR-RESISTOR	2	
QR22730		DTC124ESX	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R21001		ERDS2FJ1R8	C.RESISTOR 1/4W 1.8	1	
R21003		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R21004		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R21005		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R21006		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R21007		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R21008		ERDS2TJ152	C.RESISTOR 1/4W 1.5K	1	
R21009		ERDS2FJ1R8	C.RESISTOR 1/4W 1.8	1	
R21011		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R21012		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R21013		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R21014		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R21015		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R21016		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R21017		ERDS2FJ3R9	C.RESISTOR 1/4W 3.9	1	
R21019		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R21020		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R21021		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R21022		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R21023		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R21024		ERDS2TJ122	C.RESISTOR 1/4W 1.2K	1	
R21025		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R21026		ERG1SJ181	M.RESISTOR 1W 180	1	
R21027		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R21029		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R21030		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R21031,32		ERDS2TJ101	C.RESISTOR 1/4W 100	2	
R22701,02		ERDS2TJ391	C.RESISTOR 1/4W 390	2	
R22703		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22704		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R22705		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R22706		ERDS2TJ124	C.RESISTOR 1/4W 120K	1	
R22707		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22708		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R22709		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22710		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22711		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22712		ERDS2TJ223	C.RESISTOR 1/4W 22K	1	
R22713		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R22714		ERDS1TJ560	C.RESISTOR 56	1	
R22715		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R22716		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R22717,18		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22719		ERDS2TJ563	C.RESISTOR 1/4W 56K	1	
R22720		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R22721,22		ERX12SJR27	M.RESISTOR 1/2W 0.27	2	
R22723		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22724		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R22726		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R22727		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R22728		ERDS2TJ752	C.RESISTOR 7.5K	1	
R22729		ERDS2TJ104	C.RESISTOR 1/4W 100K	1	
R22730,31		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22732		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R22733		ERDS2TJ224	C.RESISTOR 1/4W 220K	1	
R22734,35		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	2	
R22736		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22737		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
R22738		ERDS2TJ221	C.RESISTOR 1/4W 220	1	
R22739-41		ERDS2TJ222	C.RESISTOR 1/4W 2.2K	3	
R22742		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R22743		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R22744-46		ERDS2TJ101	C.RESISTOR 1/4W 100	3	
R22747-58		EROS2CKG1500	M.RESISTOR 1/4W 150	12	
R22759		ERDS2TJ153	C.RESISTOR 1/4W 15K	1	
R22760		ERDS2TJ473	C.RESISTOR 1/4W 47K	1	
R22761		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R22762,63		ERDS2TJ103	C.RESISTOR 1/4W 10K	2	
R22764		ERDS2TJ332	C.RESISTOR 1/4W 3.3K	1	
R22765		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22766		ERDS2TJ183	C.RESISTOR 1/4W 18K	1	
R22767		ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R22768		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R22769		ERG2SJ271	M.RESISTOR 2W 270	1	
R22770		ERDS1FJ2R2	C.RESISTOR 1/2W 2.2	1	
R22771		ERDS2TJ561	C.RESISTOR 1/4W 560	1	
R22772,73		ERDS2TJ104	C.RESISTOR 1/4W 100K	2	
R22774-76		ERDS2TJ680	C.RESISTOR 1/4W 68	3	
			MISCELLANEOUS		
		VJF0760	BIND	1	
		VMC0587	HOLDER SPRING	2	
		VSC3065	HEAT SINK	1	
		VMC0393	TR. HOLDER SPRING	1	
		VJF0215	BIND	1	
	■	VEK5217	AUDIO POWER C.B.A.		
			CAPACITORS		
C21057		ECA1EPXS102		1	
C21058		ECQV1H564JZ	P.CAPACITOR 50V 0.56U	1	
C21059		ECA1EPXS102		1	
C21060		ECQV1H564JZ	P.CAPACITOR 50V 0.56U	1	
C21061		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
			DIODE		
D21050		S1WB10	DIODE	1	
			CONNECTORS		
P21020		VJP2527B	CONNECTOR(MALE) 2P	1	
P21021		VJP1230T	CONNECTOR(MALE) 3P	1	
			TRANSFORMER		
T21002		VTP0327	TRANSFORMER	1	<!>
	■	VEK5215	PRIMARY POWER C.B.A.		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			CAPACITOR		
C21050		ECKDNS102KB		1	<!>
			FUSE		
F21001		XBA1C12NU100	FUSE	1	<!>
			COIL		
L21001		ELF18D290B	COIL 29UH	1	<!>
			CONNECTORS		
P21011		VJP2527B	CONNECTOR(MALE)	1	
P21011		VJS2764	CONNECTOR(FEMALE)	1	
P21012		VJP1146	CONNECTOR(MALE) 10P	1	
			RESISTOR		
R21050		ERC12ZGK685	SOLID 1/2W 6.8M	1	<!>
			TRANSFORMER		
T21001		VTP0328	TRANSFORMER	1	<!>
			MISCELLANEOUS		
		VJF0318	FUSE HOLDER	2	<!>
	■	VEP91052D	POWER TR. C.B.A.		
			CAPACITORS		
C21013		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C21017		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C21035,36		ECQV1H564JZ	P.CAPACITOR 50V 0.56U	2	
C21037		ECEA1CU472	E.CAPACITOR 16V 4700U	1	
C21045,46		ECEA1AK470	E.CAPACITOR 10V 47U	2	
C21047,48		ECEA1CK470	E.CAPACITOR 16V 47U	2	
			ICS		
IC21001		SI3090C	IC	1	
IC21002,03		SI3050C	IC	2	
IC21005		SI3090C	IC	1	
			CONNECTORS		
P21006		VJP1930T	CONNECTOR(MALE) 15P	1	
P21009		VJP1148	CONNECTOR(MALE) 2P	1	
P21015		VJP1229T	CONNECTOR(MALE) 2P	1	
			TRANSISTORS		
Q21001		2SB1375	TRANSISTOR	1	
Q21006		2SB1375	TRANSISTOR	1	
	■	VEP91053A	IR REMOTE CONTROL C.B.A.		
			CAPACITORS		
C6701		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C6702		ECKF1H471KB	C.CAPACITOR 50V 470P	1	
C6703		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C6704		ECEA1HK3R3	E.CAPACITOR 50V 3.3U	1	
C26007		ECEA0JK101	E.CAPACITOR 6.3V 100U	1	
			DIODES		
D6701		PN323B	PHOTO DIODE	1	
D26101		EBR3422K	DIODE	1	
			IC		
IC7601		UPC1490HA	IC	1	
			CONNECTOR		
P26007		VJP1233T	CONNECTOR(MALE) 6P	1	
			RESISTORS		
R6701		ERDS2TJ154	C.RESISTOR 1/4W 150K	1	
R6702		ERDS2TJ8R2	C.RESISTOR 1/4W 8.2	1	
R6703		ERDS2TJ103T	C.RESISTOR 1/4W 10K	1	
R26101		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R26104		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R26109		ERJ6GEYJ181	M.RESISTOR CH 1/10W 180	1	
			SWITCH		
S26101		EVQQS307K	SWITCH	1	
			MISCELLANEOUS		
		VGQ0458	LED SPACER	1	
	■	VEK5011	S-VIDEO OUT C.B.A.		
			CONNECTORS		
J23706		VJJ0161	CONNECTOR	1	
			CONNECTORS		
P23706		VJP1244T	CONNECTOR(MALE) 4P	1	
P23706		VJS1231T	CONNECTOR(FEMALE) 4P	1	
P23708		VJS1231T	CONNECTOR(FEMALE) 4P	1	
	■	VEK5028	POWER IN/OUT C.B.A.		
			CONNECTORS		
P21010		VJS2986	CONNECTOR(FEMALE)	1	
P21011		VJS2764	CONNECTOR(FEMALE) 2P	1	
	■	VEK4858	DOOR SW C.B.A.		

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			CONNECTOR		
P26205		VJS1141T	CONNECTOR (FEMALE) 2P	1	
			MISCELLANEOUS		
		VSH0046	LIMIT SWITCH	1	
	■	VEK4994	LED C.B.A.		
			LEDS		
D26005		LN38GCPP	LED	1	
D26006		LN48YCPP	LED	1	
D26007		LN38GCPP	LED	1	
D26008		LN48YCPP	LED	1	
			MISCELLANEOUS		
		KL02	LED SPACER	4	
	■	VEP96173A	JOG C.B.A.		
			LEDS		
D26309		LN38GCPP	LED	1	
D26310		LN48YCPP	LED	1	
D26311		LN38GCPP	LED	1	
			IC		
IC26301		M66312FP	IC	1	
			CONNECTORS		
P26301,02		VJS2949B010	CONNECTOR(FEMALE) 10P	2	
			TRANSISTOR CHIPS		
Q26301-04		2SD601	TRANSISTOR CHIP	4	(Q,R,S)
			RESISTORS		
R26301-05		ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	5	
R26306,07		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	2	
R26308		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	
R26309		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R26310		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R26311		ERJ6GEYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R26312		ERJ6GEYJ103	M.RESISTOR CH 1/10W 10K	1	
R26313		ERJ6GEYJ184	M.RESISTOR CH 1/10W 180K	1	
R26314		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
R26315		ERJ6GEYJ681	M.RESISTOR CH 1/10W 680	1	
R26316-22		ERJ6GEYJ331	M.RESISTOR CH 1/10W 330	7	
R26323		ERJ6GEYJ473	M.RESISTOR CH 1/10W 47K	1	
			SWITCHES		
S26301-04		EVQQS307K	SWITCH	4	
			MISCELLANEOUS		
		KL02	LED SPACER	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VSQ0654	JOG UNIT	1	
	■	VEK5006	HEADPHONE VR C.B.A.		
			CONNECTOR		
P24503		VJP1233T	CONNECTOR(MALE) 6P	1	
VR24501		EVJY00F20A15	HEADPHONE VOLUME	1	
	■	VEP94077A	HEADPHONE C.B.A.		
			CAPACITORS		
C24501,02		VCYD1C104MR1	S.CAPACITOR 16V 0.1U	2	
C24503		ECQV1H394JZ	P.CAPACITOR 50V 0.39U	1	
			IC		
IC24501		M5218P	IC	1	
			HEADPHONE		
J24501		VJJ0273	HEADPHONE JACK	1	
			CONNECTORS		
P24201		VJS1232T	CONNECTOR(FEMALE) 5P	1	
P24501		VJP1232T	CONNECTOR(MALE) 5P	1	
P24501		VJS1232	CONNECTOR(FEMALE) 5P	1	
P24502		VJP1233T	CONNECTOR(MALE) 6P	1	
			RESISTORS		
R24501,02		ERJ6GEYJ102	M.RESISTOR CH 1/10W 1K	2	
R24503,04		ERJ6GEYJ123	M.RESISTOR CH 1/10W 12K	2	
R24505,06		ERJ6GEYJ153	M.RESISTOR CH 1/10W 15K	2	
R24507,08		ERG12ANJ470	M.RESISTOR 1/2W 47	2	
			MISCELLANEOUS		
		VMC0382	SNAP PLATE	1	
		VMP2628	HEADPHONE HOLDER SPRING	1	
	■	VEK4860	PICK UP INTERFACE C.B.A.		
			CAPACITORS		
C25001,02		ECEA0JKS220	E.CAPACITOR 6.3V 22U	2	
C25003		ECST1CY1052	T.CAPACITOR 16V 1U	1	
			CONNECTOR		
PF25001		VJS2710B024	CONNECTOR (FEMALE) 24P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			RESISTORS		
R25001		ERJ6GMYJ183	M.RESISTOR CH 1/10W 18K	1	
	■	VEK4895	LIMIT SW C.B.A.		
			CONNECTOR		
P22009		VJS1233T	CONNECTOR (FEMALE) 6P	1	
			MISCELLANEOUS		
		VSH0037	LIMIT SWITCH	3	
	■	VEK4826	DISC DETECT C.B.A.		
			DIODE		
D21201		RPR359F	DIODE	1	
			CONNECTOR		
P22011		VJS1230T	CONNECTOR (FEMALE) 3P	1	
			MISCELLANEOUS		
		VMX1421	PHOTO SENSOR SPACER	1	
	■	VEP66128B	REMOTE CONTROL C.B.A.		
			CAPACITORS		
C6801		ECEA0JKS101	E.CAPACITOR 6.3V 100U	1	
C6802,03		ECUM1H221JN	C.CAPACITOR CH 50V 220P	2	
C6804		ECEA1HKS010	E.CAPACITOR 50V 1U	1	
C6805		ECEA1HKSR22	E.CAPACITOR 50V 22U	1	
C6806		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	1	
			DIODES		
D6801		SE303ACYTF	DIODE	1	
D6802		LN25RCP	DIODE	1	
D6804-12		MA221	DIODE	9	
			IC		
IC6801		M34200VDA	IC	1	
			CONNECTOR		
P6801		VJS2849	CONNECTOR	1	
			TRANSISTORS		
Q6801		MSB709	TRANSISTOR	1	
Q6802-05		MSD601	TRANSISTOR	4	
Q6806		MSB709	TRANSISTOR	1	
Q6807,08		MSD601	TRANSISTOR	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			COMBINATIONS		
QR6801		UN7231	TRANSISTOR-RESISTOR	1	
QR6802		MRN1404	TRANSISTOR-RESISTOR	1	
QR6804		MRN1407	TRANSISTOR-RESISTOR	1	
			RESISTORS		
R6801		ERJ8GCYJ8R2	M.RESISTOR CH 1/8W 8.2	1	
R6802		ERJ6GMYJ471	M.RESISTOR CH 1/10W 470	1	
R6804		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6806,07		ERJ6GMYJ104	M.RESISTOR CH 1/10W 100K	2	
R6808		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6809		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6810		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6811		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6812		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6813		ERJ6GMYJ473	M.RESISTOR CH 1/10W 47K	1	
R6814		ERJ6GMYJ184	M.RESISTOR CH 1/10W 180K	1	
R6815		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6816		ERJ6GMYJ122	M.RESISTOR CH 1/10W 1.2K	1	
R6817-22		ERJ6GMYJ223	M.RESISTOR CH 1/10W 22K	6	
R6824		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6825		ERJ6GMYJ105	M.RESISTOR CH 1/10W 1M	1	
R6826		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6827		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
R6828		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6831		ERJ6GMYJ103	M.RESISTOR CH 1/10W 10K	1	
R6835		ERJ6GMYJ102	M.RESISTOR CH 1/10W 1K	1	
R6836		ERJ6GMYJ472	M.RESISTOR CH 1/10W 4.7K	1	
R6837		ERJ8GCYJ8R2	M.RESISTOR CH 1/8W 8.2	1	
			OSCILLATOR		
X6801		EF0A440K04A1	CRYSTAL OSCILLATOR	1	
			MISCELLANEOUS		
		VJR0576	ELECTRODE (+)	1	
		VJR0577	ELECTRODE (-)	1	